

OCEAN DUMPING

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

OF THE

COMMITTEE ON

ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

S. 824

A BILL TO REAUTHORIZE AND AMEND TITLE I OF THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT OF 1972, TO BAN OCEAN DUMPING AT THE 12-MILE SITE, TO DEVELOP A PLAN FOR THE REVITALIZATION OF THE NEW YORK BIGHT APEX AND THE HUDSON-RARITAN ESTUARY, AND FOR OTHER PURPOSES

AND

S. 1502

A BILL TO AMEND AND EXTEND TITLE I OF THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT, AS AMENDED, FOR 2 YEARS

JULY 30, 1985

Printed for the use of the Committee on Environment and Public Works



U.S. GOVERNMENT PRINTING OFFICE

52-425 O

WASHINGTON : 1985

5321-31

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OCEAN DUMPING

TUESDAY, JULY 30, 1985

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
Washington, DC.

The subcommittee met at 2:18 p.m., in room SD-406, Dirksen Senate Office Building, Hon. John H. Chafee (chairman of the subcommittee) presiding.

Present: Senators Chafee, Abdnor, Moynihan, and Lautenberg.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Senator CHAFEE. Good afternoon, this is a hearing of the Subcommittee on Environmental Pollution of the Environment and Public Works Committee. I welcome everybody here, and I apologize to my colleagues and to each of you for being a little bit late.

This hearing is on the reauthorization of title I of the Marine Protection, Research, and Sanctuaries Act, commonly known as the ocean dumping bill.

Today's witnesses will be testifying on two bills. The first, S. 824, the Ocean Revitalization Act, was introduced by Senator Lautenberg, who is a very active and valued member of this subcommittee, and who has shown a strong interest in providing environmental protection of our oceans. The second bill, S. 1502, which I introduced by request, is a simple extension of the existing program, but with an increase in the authorization level from \$4.2 to \$8.8 million in fiscal year 1986.

The last time this committee and the Senate dealt with ocean dumping issues was in 1982 when a moratorium on low-level nuclear waste was enacted. That makes this hearing and movement on this legislation quite timely. Over the past several years concern has been expressed that the act is not working as Congress intended. In 1977, Congress amended the law to prohibit ocean dumping of sewage sludge and industrial waste after 1981 if it unreasonably degraded the environment. In other words, in 1977, we passed a law that said, by 1981 you have got to stop dumping sludge and industrial waste if it unreasonably degraded the environment. However, in 1981, a Federal court in New York held that sludge could be determined to be degrading only if a balancing analysis demonstrated that harm from ocean dumping outweighed the incremental cost and impact of land-based alternatives.

So we have a situation where dumping of sludge continues even though it may fail the ocean environmental criteria established by

EPA. This is an interesting contrast to our environmental laws, especially the Resource Conservation and Recovery Act, the so-called RCRA, which says that you can't dump hazardous waste in landfills unless human health and the environment are protected.

I am afraid that if we continue with the kind of balancing analysis that is now required, we may find the oceans at the short end of the stick. The oceans are the ones that are going to lose out. Relatively little sludge and industrial waste is now being dumped into the ocean, however, as we clamp down on the disposal of hazardous waste in landfills as mandated by RCRA, and create more sludge by building secondary waste water treatment plants, pressure will increase to dump waste in the ocean.

Another issue is the disposal of dredge material. About 90 percent of all materials dumped in the ocean is spoil from dredging projects in our rivers and harbors. As we move forward to bigger harbor dredging projects, the volume of spoil will increase. Some of that spoil is now and will probably be contaminated with hazardous materials, so proper disposal is necessary to protect the marine environment. I am afraid the oceans may not be on an equal footing with other disposal methods, and the result could make our marine waters preferable disposal alternative. If that is the case, what will the ocean environment be like 50 or 100 years from now.

Changes are needed to the Ocean Dumping Act to assure proper protection for the marine environment. We are looking forward to hearing from the witnesses so we can get a good input on ocean dumping matters.

We have two distinguished gentlemen here, one from New York and one from New Jersey, who have deep interest in this.

Senator Moynihan, if you have a statement, this would be the proper time.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator MOYNIHAN. I do, Mr. Chairman. I thank you for the opportunity to make a brief statement, which is to say that there is a great measure of harmony in our purposes here. You have spoken to the general condition which is all around us, and there is the specific issue also of Senator Lautenberg's legislation which has to do with the use by New York mainly, some by New Jersey, of a dumping site called the Twelve-Mile Site off of the coast of New Jersey.

It has been agreed that this has to stop. In April, the EPA let it be known that this had to end in a 30-month time range, and it is going to end in the 30-month time range. There is some discussion about how to provide the transportation and things like that, which are secondary. This particular problem, at minimum, is being moved 90 miles further offshore.

Senator CHAFEE. Does that complete your statement, Senator?

Senator MOYNIHAN. Yes.

Senator CHAFEE. Senator Lautenberg, why don't you go ahead.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S.
SENATOR FROM THE STATE OF NEW JERSEY

Senator LAUTENBERG. I am happy to be on the same side of the table as Senator Moynihan. Our friendship goes beyond any bickering about what is good for the environment. Our timetables may be different on some of these things, but we know what is good for the region is good for each of our States.

Mr. Chairman, I thank you very much for holding this hearing. You made a commitment that we would be holding hearings on the Ocean Dumping Act. I asked for that commitment because the Senate needs to take action to address the serious problems caused by ocean dumping of sewage sludge off of the New Jersey coast. I do appreciate your keeping that commitment and scheduling these hearings on S. 824, the Ocean Revitalization Act, which I first introduced in 1984 and reintroduced again this year. I am optimistic that the Senate will enact ocean dumping amendments during this Congress.

Sewage sludge dumping off of the New Jersey coast has been going on since the 1920's. Congress intended, when it enacted the Ocean Dumping Act in 1971, to put an end to the continued degradation of our oceans. This intent was reaffirmed in 1977 when the Congress adopted an amendment to the act to halt harmful dumping of sewage sludge by the end of 1981. A law suit brought by New York City, and the EPA's agonizingly slow response to this lawsuit, has resulted in the continued dumping of sewage sludge at the 12-mile dumpsite to the present time.

On April 1 of this year, EPA finally announced its decision to end dumping at the 12-mile dumpsite. I was happy about this decision because the action was taken after many years of regulatory delay and litigation.

It is important that the transition of dumping from the 12-mile to the 106-mile site be achieved as quickly as possible. Both EPA and the New Jersey Department of Environmental Protection consistently have said that this transition could occur within 18 months of a decision to close the 12-mile site, or October 1, 1986. However, EPA recently negotiated agreements with the existing dumpers which would allow ocean dumping to continue again through the end of 1987.

All of us concerned about the health of our beaches, fisheries, and other coastal resources have to be assured that the schedule that EPA has announced ends dumping at the 12-mile site at the earliest possible moment.

I am willing to listen to EPA's explanation for the delay, but the burden is on EPA to show this committee why 18 months is not a reasonable time to accomplish this.

Mr. Chairman, EPA's decision to close the 12-mile dumpsite does not resolve the sewage sludge question. Dumping of sewage sludge will commence at the 106-mile dumpsite, and we have to be assured that EPA will have an adequate monitoring program in place at the 106-mile site prior to the commencement of dumping to monitor the impact of that dumping.

At the same time, we just can't forget about the 12-mile dumpsite to which sludge dumping is only one of a number of sources of

pollutants, which have resulted in the degradation of the New York Bight Apex. We need to establish a mechanism to plan for the revitalization of this area.

Finally, Mr. Chairman, my goal, which I know you share, is to end ocean dumping of sewage sludge altogether, and to do this, we need to ensure that EPA has a well-designed program for developing safe, cost effective, and other alternatives for recycling and disposal of sewage sludge.

Mr. Chairman, the Ocean Revitalization Act addresses the points, and I look forward to working with you and other members of this committee as we consider the legislation.

Thank you.

Senator CHAFEE. Thank you very much, Senator Lautenberg.

I have here a statement from Senator Mitchell who, unfortunately, is unable to be here today. We will put that statement in the record.

[Senator Mitchell's statement follows:]

OPENING STATEMENT OF GEORGE J. MITCHELL, U.S. SENATOR FROM THE STATE OF
MAINE

Mr. Chairman, I would like to welcome the witnesses for today's hearing on the ocean dumping provisions of the Marine Protection, Research, and Sanctuaries Act.

This hearing is a major step toward the reauthorization of this important statute. The Committee has not held general hearings on the Act since its authorization expired in September of 1982. Attention to ocean disposal of a range of waste materials has increased in the past several years. There is evidence that the demand for ocean disposal will continue to grow for the foreseeable future. I believe it is time for the Committee to review and revise the Marine Protection Act and I hope we will be able to schedule further action on this matter in the fall.

I know that several of my colleagues are interested in revising the Act to correct problems associated with past ocean dumping practices. These issues need our full attention. In addition, I hope that we can clarify our long range policies for ocean disposal. For example, we need to assess the relationship between the Marine Protection Act and other environmental statutes, particularly the Resource Conservation and Recovery Act. And, we need to consider whether to further define policies for disposal of contaminated and uncontaminated waste materials.

I hope that today's witness will help clarify the issues associated with ocean dumping and that we can proceed toward reauthorization of this important environmental statute.

Thank you, Mr. Chairman.

Senator CHAFEE. Now we will hear from our colleague, Senator Roth from Delaware. Senator, if you would come up, we would be delighted to hear your statement. We welcome you here.

STATEMENT OF HON. WILLIAM V. ROTH, U.S. SENATOR FROM
THE STATE OF DELAWARE

Senator ROTH. Thank you, Mr. Chairman.

I appreciate your holding the hearings and having the opportunity to testify before you. My goal is to make sure that ocean dumping of harmful municipal sludges will halt as soon as possible. I didn't like ocean dumping yesterday, I don't like it today, and I won't like it tomorrow. I agree with you, Senator Lautenberg.

I applaud EPA's recent decision to deny petitions to redesignate the 12-mile site for sewage sludge disposal, but frankly I am very distraught with the fact that the original, very reasonable, 12- to 18-month phaseout has been extended until December 1987.

I find it hard to believe that those communities faced with the implementation of alternate disposal options had difficulty in meeting this deadline—again, I am saying much as you did—especially since we have been attempting to establish regulations for ocean dumping and the phaseout of ocean dumping since as early as 1971.

I commend the cities of Philadelphia and Camden for phasing out ocean dumping by 1981, and I heard many of the same arguments made by those cities in the past, but they did move ahead.

Mr. Chairman, there is ample evidence that many properly treated municipal sludges have an environmentally safe alternative use either as a soil additive or chemical fertilizer substitute. We must take all opportunities to use this environmentally safe disposal method for our beneficial use.

Why does our society keep thinking of the oceans as such a wonderful place for the disposal of waste. Although I am very pleased with the redesignation decision, I am concerned with EPA's decision to designate two disposal sites within the 106-mile ocean waste dumpsite; dumping industrial waste at one site, municipal sludges at another site, will create a difficult monitoring problem. Were the marine environment to be adversely affected, it would be very difficult to determine the cause.

Mr. Chairman, although it appears that I have come here to express my displeasure with this disposal option before us, I have also come to discuss four amendments to title I of the ocean dumping law.

The first amendment that I would recommend would prohibit the ocean dumping of harmful municipal sludge by all dumpers within 18 months of the bill's enactment. Furthermore, no dumping of harmful municipal sludge by new dumpers would be permitted during that 18-month period.

Mr. Chairman, harmful municipal sludge would be any sludge that fails the EPA environmental criteria. That criteria is already spelled out in regulations developed to implement title I of the law. Existing procedures for determining the harmfulness of municipal sludges would not be compromised by this legislation.

My second amendment would establish a user fee under the ocean dumping law. Under this amendment, the Administrator shall prescribe and collect an applicable fee in the amount commensurate with the costs incurred or expected to be incurred by the Administrator in processing permits.

The amendment would direct the Administrator of the EPA to recover the Federal costs associated with ocean dumping activities such as site designation, monitoring, and surveillance. This fee would be a clear signal that the use of the ocean for waste disposal should not be free. Those communities who wish to take advantage of the disposal opportunities and use our valuable ocean resources as a dumping ground should bear the cost of ensuring its continued health.

Third, it is my opinion that any funds authorized under title I of the ocean dumping law should not be used to finance the dumping of material or the transportation of material authorized for dumping. This would include all Federal financial assistance policies, including the construction of vessels related to ocean dumping.

Finally, Mr. Chairman, I feel that any municipality that at the present time does not participate in the ocean dumping of hazardous municipal sewage sludge should not be permitted to do so. It would be my intent that all municipalities take a good hard look at environmentally sound and practical alternatives presently available, and the ocean dumping opportunity shall not be made available to them.

Mr. Chairman, it is time that we take a serious look at responsible land disposal alternatives. I recommend and urge you to consider these amendments, and thank you for holding these hearings today.

Senator CHAFEE. Thank you very much, Senator Roth.

Let me just ask you. As I understand it, under the situation as it now exists, they would have to stop by December 1987; isn't that right?

Senator ROTH. Yes, that is correct.

Senator CHAFEE. But yours would make it 18 months after passage of the legislation.

Senator ROTH. That is right.

Senator CHAFEE. So you don't gain an awful lot, do you?

Senator ROTH. I will tell you, my problem is that I have been watching this whole event unfold since 1971, and it keeps dragging out. My understanding is that originally EPA was looking at the 18-month period. I think every month we save is very important when you look at it from the standpoint of the beaches, the recreation, which I know Senator Lautenberg as well as myself are particularly concerned about.

Senator CHAFEE. I suppose, you are afraid that the December 1987 date might slip.

Senator ROTH. That has been the history. Time and again, we thought we were bringing this matter to a close, and on one basis or another, it continues dragging out.

Senator CHAFEE. Thank you.

Senator Moynihan.

Senator MOYNIHAN. We thank Senator Roth. I have no disagreement with anything you have said, except that I think the ocean is a better place to dispose of certain kinds of wastes than the land. There is more ocean, two-thirds of the globe.

On the present question, just so we have this in perspective, we are talking about an agreed upon—basically court ordered, I think but in any event—an agreed upon schedule that will end 30 months, or legislation which might take an extra 7 months, which means, in effect, 25 months. The schedule is running, and it is somewhere between 25 and 30, and it is fine by me. I would be disposed to think that we ought to let them do it according to EPA's present schedule, but no slipping.

The City of New York must stop this. They have been doing it since 1937. They know it, and I know it. As far as I am concerned there can be no slipping on the schedule.

Senator ROTH. I have great respect for you, Senator Moynihan, I know of your own interest in environmental matters, but the problem is that there are always other public officials who are looking for ways and means to delay.

I will be frank, the history is not encouraging, so I want to be tough.

Senator MOYNIHAN. I agree.

Senator LAUTENBERG. Senator Roth, I am glad to have an ally like you, not in the interest of punishing anybody, but in the interest of saving the ocean, because in all three of our States, we see the results from sewage sludge dumping. I have flown over the area, and I have seen the residue that remains after long periods of time that this material has been in the ocean. You see it thick on the beaches, you see mutated marine life, it is disgusting.

Senator ROTH. I couldn't agree more with you.

Senator LAUTENBERG. It is time. I saw a fisherman with a gallon jug filled with the water, and you almost couldn't pour it, it was that thick. While all of us would like to see the ocean preserved as a place where life continues in a relatively pristine fashion, any dumping that must take place, until we find a suitable alternative, to be in as deep an area as possible, and that is all we are talking about.

I am talking about interim solutions. I am not talking at all about permanent dumpsites. I think that we ought to move with this as step No. 1. I don't understand, and I hope we are going to find out, Bill, why it is that suddenly the delay had to take place after a lot of pushing and tugging, a lot of anxious moments.

People are concerned about the cost, and they have a right to be concerned about the cost. But in one place, the costs are retrievable, and in another place, they are not.

I thank Senator Roth for being here. I know that Senator Moynihan shares our view on protecting the environment, it is a question of getting on with it.

Senator CHAFEE. Thank you very much, Senator, for taking the time to be with us. We appreciate it.

Senator ROTH. Thank you, Mr. Chairman.

I didn't read the entire statement, and I would ask that it be entered in the record.

Senator CHAFEE. It will certainly go in the record.

Senator ROTH. Thank you, gentlemen.

Senator CHAFEE. The next panel will be Mr. Johnson, Acting Deputy Assistant Administrator for Water, EPA; and Mr. Robert Dawson, Acting Assistant Secretary of the Army for Civil Works. If you gentlemen would come up, why don't we proceed in the manner in which you are listed.

Gentlemen, if you could restrict your remarks to 5 minutes—I will say this to everybody, so I won't have to repeat it, everybody's statement will go into the record in full, so you don't have to worry about that. We will give everybody 5 minutes.

Won't you proceed, Mr. Johnson.

STATEMENT OF EDWIN JOHNSON, ACTING DEPUTY ASSISTANT ADMINISTRATOR FOR WATER, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY TUDOR T. DAVIES, DIRECTOR OFFICE OF MARINE AND ESTUARINE PROTECTION

Mr. JOHNSON. Thank you, Mr. Chairman.

Good afternoon, Mr. Chairman and members of the subcommittee. I am Ed Johnson, Acting Deputy Assistant Administrator for the Office of Water, U.S. Environmental Protection Agency. With me today is Dr. Tudor Davies, Director of the Office of Marine and Estuarine Protection.

I am pleased to be here to describe to the subcommittee the status of the agency's Ocean Dumping Program and to present our position on S. 824 and reauthorization of title I of the Marine Protection, Research, and Sanctuaries Act.

I will submit my written testimony for the record, as you have requested, and present a brief summary.

One of the highest priorities in the Office of Water in the past 2 years has been to strengthen the agency's management of marine protection programs. Through discussions with a number of interested individuals, including Members of Congress, it became apparent that there was both the need and the support necessary to consolidate and organize marine programs within one office. The intent was to provide a mechanism to ensure that our valuable coastal, estuarine, and ocean water received increased attention from senior agency management and appropriate consideration in our planning and budgeting processes. The Office of Marine and Estuarine Protection was established within the Office of Water to carry out this purpose late last year.

The Office of Marine and Estuarine Protection will conduct several major activities. In accordance with our statutory requirements, we will continue reviewing and issuing permits for ocean disposal and EPA will also continue to review dredged material disposal permits issued by the Corps of Engineers.

The program will conduct surveys of interim and existing ocean disposal sites for site designation purposes and will determine the environmental impact of such disposal. We will accelerate the preparation of environmental assessments to support site designations.

The deepwater municipal sludge dump site, more commonly known as the 106-mile site, will be monitored in accordance with a comprehensive monitoring plan to determine the environmental impacts of dumping at the site.

In cooperation with EPA's Office of Research and Development, the National Oceanic and Atmospheric Administration, and the Corps of Engineers, we will also continue efforts to examine scientific parameters for the site selection and designation process and assessment of permittee wastes.

The program will continue to implement ocean dumping regulations in accordance with the 1981 *City of New York v. EPA* court decision, which ruled that the agency must consider the comparative human health and environmental effects of land versus ocean disposal in considering an ocean disposal permit application.

At the same time, we will develop a comprehensive revision to those regulations to provide for balancing the environmental of ocean and land disposal methods, while meeting specific environmental criteria established by the statute. The comprehensive revision will take advantage of the years of experience and knowledge gained under the current regulations.

On April 1, 1985, EPA denied petitions to redesignate the 12-mile site in the New York bight apex. As you are well aware, this action culminates years of debate about sludge dumping in the Apex and the condition of the apex. We are confident that the closing of the 12-mile site, along with other EPA and State programs will improve the overall water quality of these waters.

EPA region II, which has the permitting authority for ocean dumping permits at both the 12-mile site and the deep water municipal sludge dump site, is actively pursuing efforts to transfer dumping to the deepwater site. They have recently completed negotiations with existing dumpers to establish schedules for what we consider to be a rapid and orderly removal of dumping operations from the 12-mile site. We expect the phase-out to begin in the spring of 1986, and that all dumping at the 12-mile site will be eliminated by the end of 1987.

Closure of the 12-mile site means that dumping will commence at the 106-mile site. We are confident that the marine environment at the 106-mile site will not be harmed because the great depths and current will reduce contaminants to relatively low concentrations. In order to verify our assumptions, our fiscal year 1986 budget request contains approximately \$1 million to monitor dumping activities at that site.

Finally, Mr. Chairman, with respect to Senate 824, we believe that the current Act provides a workable approach for evaluating and managing ocean disposal activities and does not require amendments other than providing the administrator discretion to adopt a user fee system for recovering the program costs of ocean disposal.

Therefore, we requested a simple 2-year authorization of title I of the MPRSA at \$8,863,800 for fiscal year 1986 and such sums as may be necessary for fiscal year 1987. The increase will fund monitoring activities at the 106-mile site and other ocean disposal activities. Specific comments on the provisions in S. 824 are contained in my written testimony that I have provided for the record.

We will be happy to respond to any questions that you may have. Senator CHAFEE. Fine, and thank you very much, Mr. Johnson. Mr. Dawson.

STATEMENT OF ROBERT K. DAWSON, ACTING ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

Mr. DAWSON. Thank you, Mr. Chairman and members of the committee.

I am Robert K. Dawson, Acting Assistant Secretary of the Army for Civil Works. I appreciate the opportunity to appear before you to discuss S. 824. I have seated behind me, to assist, if necessary, three public servants whom I would like to make known in advance to the committee, Mr. Morgan Rees, Deputy for Regulatory Matters in my office; Dr. Robert Engler, Senior Scientist and Manager of Environmental Effects of Dredging Programs at our Vicksburg Office; and Col. Philip Hall, Executive Officer in the Assistant Secretary's Office.

As you requested, my testimony today will address the Secretary of the Army's role and responsibilities under title I of the Ocean

Disposal Act, as well as the Army's views on the provisions of S. 824.

I will, as you directed, summarize my testimony.

Mr. Chairman, our interest in these proceedings is primarily in two areas. The first is our mission to construct and maintain navigation improvements within the United States. Our second area of interest is in the regulation by the Secretary of the Army of dredged material disposal activities within the United States and in the ocean. This responsibility is contained in and is administered under section 103 of the Ocean Dumping Act, section 10 of the Rivers and Harbors Act of 1899, and section 404 of the Clean Water Act.

On an average, 65 million cubic yards of dredged material, about 20 percent of the total national dredged material yardage regulated by the corps are disposed in ocean waters each year. The corps issues an average of 35 ocean dredge material permits each year under our section 103 regulatory authority.

The Army believes that the statute now provides and should continue to provide for well-reasoned consideration of all practicable alternatives for the disposal of dredged material. We are working closely with EPA to ensure that implementing regulations accomplish this.

I would like to add, Mr. Chairman, that the corps has placed, and continues to place, a high priority on research to address the environmental aspects of dredging and dredged material disposal. We see this research commitment as a continuing high priority requirement due to the complexity and environmental sensitivity of our navigation and regulatory responsibilities.

We believe that there is no need to substantively amend the current statute at this time. As presently drafted, however, S. 824 contains several provisions that might be misinterpreted or might lead to unnecessary obstacles to a reasonable and manageable ocean disposal program. Let me, if I might, touch briefly on those.

First, we believe the subcommittee should give careful consideration to the proposed amendments to section 102 which should, in our opinion, be revised and clarified. The bill includes a requirement that in conducting an analysis of a site proposed for designation, the Administrator consider the persistent effects on the ecosystem within the site. We believe this language is probably directed toward possible persistent effects of chemical contaminants which could be incorporated into the tissues of valuable living marine resources to the extent that an unacceptable adverse impact to the marine environment would occur.

We request that this understanding be clarified prior to enactment of this legislation.

The inclusion of the element of economics, as well as appropriate environmental factors in the site designation and site management process, and in any proposed amendments to the Ocean Disposal Act, would ensure appropriate consideration by both the Administrator and the Secretary of the practical aspects of using ocean-dredged material disposal sites.

We are particularly concerned about the trend to require ocean disposal of dredged material at great distances from where the dredging takes place. This should not be required unless there is

the presence of scientific evidence showing that there are environmental benefits commensurate with the additional cost of such requirement.

We do not propose that environmental safeguards be diminished in any way, but we would not feel that the act should unnecessarily inhibit timely and efficient maintenance of navigation projects.

In closing, Mr. Chairman, I again reiterate, in our view there is no need to substantively amend the current statute at this time.

The Army appreciates the opportunity to present our views on this important subject, and we will be glad to respond to your questions.

Senator CHAFEE. Fine.

Why don't you, gentlemen, proceed. I guess, going on the early bird rule, it is my understanding that Senator Lautenberg was here first. Am I correct in that, gentlemen?

Senator LAUTENBERG. No, we had a tie, and Senator Moynihan is the senior, wiser, and handsomer.

Senator CHAFEE. Without passing judgment on any of those, we will have Senator Moynihan go first.

Senator MOYNIHAN. Thank you, Mr. Chairman.

This is really not adversarial situation at all.

Senator CHAFEE. No, I know.

Senator MOYNIHAN. So our record is clear. Let me ask Mr. Johnson. New York has been dumping waste offshore since 1888, and the present arrangement actually rises out of a law suit, which was settled by the Supreme Court. The City of New York sued Passaic County, NJ, because they were dumping waste into the upper New York Harbor.

On April 1, 1985, you denied a petition to redesignate the 12-mile site, and that is it. It just stopped there. What started that? You close down this site in 30 months, how does the 30-month clock work? When does it start?

Mr. JOHNSON. We closed down the site and continued to negotiate with the dischargers of sludge to the 12-mile site under a court order in the 1981 court suit of EPA.

Senator MOYNIHAN. Now, help me. You haven't closed the site. The site is being used. You have said that the site will be closed.

Mr. JOHNSON. That is correct. Under the court order, we have initiated a phaseout of that site, although the site is not redesignated for a finite period of time.

Senator MOYNIHAN. I thought the court ordered that you had to balance land against sea, and it didn't help you get to a decision at this time.

Mr. JOHNSON. Under the court order affecting the 12-mile site and the phaseout to the 106, as I understand it, the cities could continue to operate under permits to discharge sludge that had been granted in the past. The authority to dump under those permits was to be transferred in an orderly phaseout from the 12-mile site to the 106-Mile Site.

Once they are out at the 106-mile site, then we will be considering new permits that will take into account the characteristics of the site and repermitting. But they are still operating under the original permits that were granted some years ago.

Senator MOYNIHAN. Does the permit have a time set where you say, "For five years, you may do this"?

Mr. JOHNSON. Yes. The permit is generally a 5-year permit, although it can be issued for another period.

Senator MOYNIHAN. New York City's time had expired.

Mr. JOHNSON. Yes, it had, but the court extended that time.

Senator MOYNIHAN. On April 1, what did you do?

Mr. JOHNSON. On April 1, we made a finding that the 12-mile site was no longer to be designated for disposal of sludge.

Senator MOYNIHAN. You said that by a date certain, it may no longer be used.

Mr. JOHNSON. We did not say that in the document that de-designated the site. We are operating under two basic things here. One is the de-designation of the site, which was accomplished on April 1. The second is the court order under which we are attempting to phase current dumpers out of the 12-mile site to the 106-mile site.

Senator MOYNIHAN. Where does the 30 months come from? If you don't want this legislation, you have to help us explain to our colleagues that it is not necessary. Where does this 30 months come from?

Mr. JOHNSON. The 30 months or 32 months, to be specific, came from negotiations of EPA with the current dischargers of sludge to the 12-mile site, and reflects our best negotiations with those dischargers on an equitable, yet timely transfer to the 106-mile site. It takes into account the current status of those communities with respect to capital, equipment, and contracting for construction.

Senator MOYNIHAN. What do you mean, "your best negotiations"?

Mr. JOHNSON. Our regional office entered into negotiations, and the principles that they looked at in entering those negotiations were: No. 1, that the timeframe be as short as could be considered reasonable; No. 2, that the options that the cities would have to undertake be reasonable.

Senator MOYNIHAN. Mr. Johnson, I am only asking you, is there a date certain?

Mr. JOHNSON. Yes, there is a date certain. The date certain is December 1987.

Senator MOYNIHAN. That is it.

Mr. JOHNSON. Yes.

Senator MOYNIHAN. Would you give us in writing, that fact, and I see a schedule here with respect to Westchester, Nassau, New York City, New Jersey with different percentages at different times.

Mr. JOHNSON. That is correct.

Senator MOYNIHAN. That is in writing and agreed?

Mr. JOHNSON. Yes.

Senator MOYNIHAN. Where did you file the agreement?

Mr. JOHNSON. Pardon?

Senator MOYNIHAN. There is a date certain.

Mr. JOHNSON. Yes, there is.

Senator MOYNIHAN. You have the power to enforce it?

Mr. JOHNSON. That is correct, we believe we have the authority to enforce stipulated penalties, and we will be filing those with the court along with the schedule.

Senator MOYNIHAN. The jurisdictions involved have agreed. This is an agreement, and everybody undertakes to do this.

Mr. JOHNSON. That is correct, it is an agreement.

Senator MOYNIHAN. It is about time that we did. New York City has a great deal to be proud of, it is the greatest city in the world, but it is not the greatest waste disposer in the world. I understand that very well.

I would like to see the city keep that date. The Chairman might like to hear this, we have enacted a law which requires the North treatment plant to be in operation by a date certain, or else we have to stop taking baths, or something like that.

Senator LAUTENBERG. Other things, too.

Senator CHAFEE. Do you remember when they had that coal strike, in England, they couldn't get hot water, they had billboards out that said, "Bathe with a neighbor."

Senator MOYNIHAN. May I ask Dr. Engler one thing?

Senator CHAFEE. You go ahead.

Senator MOYNIHAN. I would like to ask Secretary Dawson a question, it is a fascinating line that about 20 percent of the nationally dredged material in the country is now disposed of at sea. But the geologists say that the amount of dredged material that is dropped into the ocean, most of which is just soil, it has to be minuscule compared to the normal runoff of earth through rivers. Rivers are always filling up with soil.

Mr. DAWSON. I think that that is accurate. Let me ask Dr. Engler, if I might, to see if he can quantify that.

Senator CHAFEE. Why don't you identify yourself, and you can stay right there, if you want.

Dr. ENGLER. I am Robert Engler from the Corps of Engineers.

Senator CHAFEE. What are your duties there?

Dr. ENGLER. I am the senior scientist and manager of the environmental effects of dredging programs for the Waterways Experiment Station, the corps' environmental research facility.

In response to the question, I will give you an example. The corps would dispose annually to the ocean about 65 million cubic yards. The Mississippi River puts in the Gulf of Mexico about 365 million cubic yards annually. So even compared to one river, it is minuscule.

Senator MOYNIHAN. It is probably more than you would like, but the St. Lawrence River does, the Hudson does.

Mr. ENGLER. It is quite a bit more than the East Coast rivers, but quite a lot.

Senator MOYNIHAN. My point, Mr. Chairman, the normal way that the world works, an enormous amount of soil flows into the ocean, sometimes more than there should, and other times not so much. It is natural.

The other thing that I wanted to ask, or call to the attention of the committee, really, because I had not heard it, and maybe you are going to pursue it, is that the Secretary says that the environmental impacts associated with dredged materials within the near-shore ocean environment are much less than those associated with the disposal further offshore. You speak of the erroneous assumption that disposal of dredged material further offshore equates in all cases a reduced environmental impact.

That is not open to the New York pipes, but it is an interesting point. I take it, you are saying that for environmental purposes, whatever factor they are, the nearer in-shore you dump your dredged material, the better it might be.

Mr. DAWSON. Underlying those statements, Senator, and Dr. Engler will elaborate in a moment, is that we need to test and take each situation by itself, and look at which is the most environmentally injurious.

Dr. ENGLER. As a general statement, the near-shore environment is much more physically dynamic, and has a greater assimilative capacity for physical loadings of soil material.

Senator MOYNIHAN. What you are saying is that what goes down 600 feet of water will stay there, whereas in-shore, it will boil up and resettle.

Dr. ENGLER. Generally speaking, yes. Some in-shore areas are quite stable and should be treated on a case-by-case basis, as Mr. Dawson stated. But as a general statement, yes.

Senator MOYNIHAN. I find that interesting, the case where an intuitive thought might not be accurate. Thank you.

Senator CHAFEE. Senator Lautenberg.

Senator LAUTENBERG. Thank you, Mr. Chairman.

Mr. JOHNSON, you heard what I said before regarding the original date for ending the 12-mile dumpsite. Was the 18-month deadline originally developed thought to be adequate based on analysis of the facts?

Mr. JOHNSON. There were some assumptions made that led us to believe early on that an 18-month period might, in fact, be sufficient. When we actually began negotiations, it turned out that some of the assumptions that we made were, in fact, not correct. Therefore, it led to a longer negotiated time.

Senator LAUTENBERG. What are some of the things that you can recall that were not as you thought they would be?

Mr. JOHNSON. We made some assumptions with respect to available capacity, for example, both barge capacity and storage capacity, that turned out to be overly optimistic.

We presumed that the cities would, in fact, take steps to begin to move to the 106-mile site earlier, that is, before the actual negotiations started, and that, in fact, did not happen.

People decided to use technologies different from the technologies that we assumed. For example, the cities in New Jersey found that it was more efficient for them to go into a joint venture to handle the economics of the situation than it would be to contract individually. The city of New York determined that it was in their best interest to construct their own barges. These are some things that were not in the original assumptions.

Senator LAUTENBERG. These had more to do with the economics of functions than it had to do with the science.

Mr. JOHNSON. That is correct.

Senator LAUTENBERG. Included in your evaluation, I assume, was some concern for the environment at sea, the dispersal qualities. What is it that makes the 106-mile site better than the 12-mile site, or is it just our abhorrence of a site so close to shore?

Mr. JOHNSON. I think the 106-mile site, by being a deeper site, provides for better dispersal of the sewage sludge constituents.

Senator LAUTENBERG. Do you know what the respective depths are between the two sites? I do, or I think I do.

Mr. JOHNSON. No; I don't know off-hand.

Senator LAUTENBERG. Do you know, Doctor. Twelve-mile is about 60 to 80 feet, and the other is 600 to 800 feet, I think.

Mr. JOHNSON. It is a lot deeper than that.

Dr. DAVIES. It is a lot deeper, more like 7,000 to 9,000 feet.

Senator LAUTENBERG. More like 1,000 feet.

Dr. DAVIES. Yes.

Senator LAUTENBERG. So that the dispersal quality, current, movement, waves, winds, et cetera, do create a greater dynamic environment out there than it does at the 12-mile site, which is protected by Long Island on one side and the Hook of New Jersey on the other.

Mr. JOHNSON. Yes.

Dr. DAVIES. Senator, sewage sludge is something like 90 percent water, and we are concerned about the nutrient content of sludge, particularly in near-shore waters where we have other nutrient and pollutant sources from rivers, discharges from point and non-point sources. Our concern is that we would be stressing coastal waters by adding sewage sludge to them. That is why we came to the conclusion that it is more acceptable to take sewage sludge out into deep water where it can disperse. We would then not add a great deal of nutrients to the water, and perhaps produce eutrophication, et cetera. So we find it more acceptable to do that than to dispose of sludge in near-shore waters.

To respond, in the case of dredged material, I would not prefer to see dredged material transported to deep water and dispersed through the water column. Our preference there, perhaps for the cleaner materials, would be to have it either incorporated into long-shore drift, or have it contained in a selected containment site where we can either cap it or maintain it in a specific site.

When we looked at the mud dumpsite, in the New York Bight, for instance, we found that we had a containment site and that 80 percent of the material that had been put into that site was still retained in the site, whereas sewage sludge will disperse widely and will not be contained within the site.

Senator LAUTENBERG. So the different characteristics call for different locations.

I wanted to ask you about the phase-out schedule. I understand that there are two components involved in the schedule: the administrative action, that is, issuing the contracts, calling for the construction of the additional capacity where that is needed, and we have talked about that.

Do you have any idea how long it may take? You said something, Mr. Johnson, about there wasn't a full realization of how long it might take to get the various components together to make the move, but some of these things are going to be sequential. Some of these are going to be ready earlier, and others a little bit later.

I would like to be as clear as possible that it is not your view that it has to take 33 months for everybody to move out. You said earlier that you were disappointed at the various agencies, communities, and what-have-you, not getting started immediately, or not having started sooner based on the anticipation of those factors.

How do we keep these things moving along? Will we get to the point, 33 months from now, or 30 months from now, where you say, well, community X didn't do it, and community Y didn't do it, and community Z didn't do it, and here we are, why shouldn't we be looking at extending that once more?

Mr. JOHNSON. We will be filing these schedules jointly with the court, as agreed upon schedules between the EPA and the respective disposers. The EPA will also seek to fix stipulated penalties for each of the dates in the progression of removing the waste from the 12-mile site. Between the penalties and the opportunity to go back to the court if the schedules are not being met, we believe that we will be able to tell early on in the process, and not have to wait until December 1987 to know whether we are on the right track to meet the various dates throughout the whole period.

Senator LAUTENBERG. When do you think we will see the first use of the 106-mile site take place, do you have any commitment from any of the dumpers?

Mr. JOHNSON. Yes, our projection is that Westchester County will be moving out to the 106-mile site in March 1986.

Senator LAUTENBERG. Why would anybody want to advance that schedule if they don't have to, if it doesn't cost them anything?

Mr. JOHNSON. The agency sat down with each discharger and attempted to negotiate the earliest possible time that we could get that discharger without providing any undue hardship to the discharger. To the extent that the people could move earlier, we attempted to get them to move earlier. It wasn't that they necessarily came in and volunteered to do that. In fact, the schedules that were volunteered were, in many cases, considerably longer than the schedules that were actually negotiated.

Senator LAUTENBERG. How many vessels or barges will have to be built or refurbished to have a total transition to the 106-mile site, do you have any idea?

Mr. JOHNSON. We have answered that in the correspondence. I will have to look that up. I believe I can supply that for the record, Senator. (See p. 66.) There are several barges that would have to be refurbished or constructed, I believe four or five for New York City, plus some others for the other communities.

Senator LAUTENBERG. Can we estimate the time that it will take to get enough of these so that we may have a major movement of that material out to the 106-mile site within the original 18 months prescribed date?

Mr. JOHNSON. I believe we are trying to get about 50 percent of the material out within that period of time.

Senator LAUTENBERG. Can we use any of the yard capacity that is fairly dormant right now to accelerate that process?

Mr. JOHNSON. I have seen some correspondence and estimates that were provided at one time for the city of New York, which ranged, I believe, from 9 months for a single barge to be either built or refurbished up to perhaps 20 months to deliver a series of barges.

If one adds to that the estimated contracting time, which we have been told takes about 12 months, so we are talking about approximately 21 months for delivery of the first barge, and about 32 months for delivery of the last barge under that kind of a schedule.

Senator LAUTENBERG. What we can do, we can mandate, within reason, some conformity to earlier dates and try, if we have to go to December 1987, to make certain that that is going to be the last of the cycle, and it should be substantially lower quantities.

Mr. JOHNSON. That is correct, Senator.

Senator LAUTENBERG. Do you foresee any problem that would mitigate against the December 1987 deadline being a sufficient period of time for all of that junk to be taken out that far?

Mr. JOHNSON. Senator, there are always unexpected contingencies that come up. Certainly, if there is a strike, for example, at the facility that is refurbishing or reconstructing barges, that could pose a problem. On the other hand, there are some contingencies that, in fact, have been planned for. For example, the communities in the State of New Jersey have indicated that if their attempts to go together on a joint venture fell apart, they will contract as individuals to continue to meet the same schedule.

So to the extent that we could look at those contingencies and try to build them in, we have. I simply can't say that anything is 100-percent certain in this life, and there are some things that we may run into.

Senator LAUTENBERG. My time is up, Mr. Chairman, but I have to ask Mr. Dawson one question.

Senator CHAFEE. You go ahead.

Let me see, do you have any more questions of these witnesses, Senator Moynihan?

Senator MOYNIHAN. No, Mr. Chairman.

Senator CHAFEE. I have a couple of questions myself, but you go ahead.

Senator LAUTENBERG. Mr. Dawson, you make a reference to EPA site surveys, and you indicate that near-shore disposal can quite often be highly beneficial in nature—You don't say, to nature, but in nature—Is there a point that I have missed here, and does either of you want to respond?

Mr. DAWSON. Senator, what we were getting at there, you are aware of the distinction between sludge and dredged material, and we were getting at sand replenishment, beach nourishment, and that kind of beneficial disposal which is quite often the case if the material is not contaminated.

Senator LAUTENBERG. Would that be your preference, if you had an option, to bring it in close? It seems to me that we are stretching the case a little bit to say that it is beneficial. Is there always some reservation about what is in that material, and sometimes we don't find out until we stir it up that it is a lot worse than what was thought to be?

Mr. DAWSON. Senator, I think what we are trying to say there is that we would need to look at each case and make sure with proper testing and monitoring, that it was a safe and productive undertaking.

Senator LAUTENBERG. Thank you, Mr. Chairman, I appreciate it.

Senator CHAFEE. Thank you.

I just had a couple of questions here, and these go to you, Mr. Johnson.

The act prohibits the dumping of industrial waste after 1981. My question is, are any industrial waste now being dumped? dumped?

Mr. JOHNSON. Yes, there are some industrial wastes, particularly acid wastes, that are currently being discharged to the ocean.

Senator CHAFEE. Do you think that somebody could construe the judge's decision to allow dumping of industrial wastes? Obviously, some have because you are doing some industrial waste now, is that right?

Mr. JOHNSON. That is correct.

Senator CHAFEE. Isn't there a London Dumping Convention dealing with all of this matter?

Mr. JOHNSON. There is a London Dumping Convention to which the United States is a signatory party. Among other things, it prevents the discharge of certain wastes into the ocean, but it does not prohibit all industrial wastes or all things that might be considered hazardous substances.

Senator CHAFEE. Does it permit acids?

Mr. JOHNSON. Yes, it would.

Senator CHAFEE. That is why you are doing it now.

I missed a beat here. You say that one of the problems here is that New York City has to construct the proper vessel.

Mr. JOHNSON. Yes, they will be building ocean-going barges or refurbishing existing barges.

Senator CHAFEE. But that must be a relatively simple matter, mustn't it?

Mr. JOHNSON. According to the information that we have, generated both by the region and as a result of the hearing in the House a couple of weeks ago, and based on an analysis done by a couple of my own staff members, the timeframes appear to be realistic. We could not find an option, even under a different set of assumptions than were faced in the negotiations, that this could be done in 18 months.

We have looked at the possible construction time for barges, along with the contracting period that is necessary, and believe that the dates are realistic on that basis.

We also have looked at some other options, and find that they probably could not be implemented in much less time. We also looked at existing capacity, to see if we could find existing capacity that was available anywhere in the area, and we were unable to do that as well. We feel that we have about 50 percent of the capacity that is actually required.

Senator CHAFEE. Let me ask you this, review the bidding a bit. Originally, the decision of law that we passed here was for a ban of ocean dumping after 1981; is that right?

Mr. JOHNSON. That is correct.

Senator CHAFEE. Then the judge came along and said that, in effect, didn't ban ocean dumping, and you had to take other things into consideration, and you had to do this balancing act as to what is the most harmful, land dumping or ocean dumping. Did he decide that ocean dumping was the best?

Mr. JOHNSON. The statute itself talks about dumping of materials that would cause unreasonable degradation. We defined "unreasonable" as materials which would fail our environmental criteria as spelled out in the regulations. The judge went a step further and said, you have to look beyond your criteria, and you, as an agency,

have to look at alternatives and balance the ocean disposal against land-based disposal.

Senator CHAFEE. The next thing that happened is that it didn't end in 1981, as we all thought it would, but you then went on and said, it could be dumped, and at that time it was the 12-mile limit. Then you gave them until 1987, December of 1987, to get out to the 106-mile limit. Is that it?

Mr. JOHNSON. That is correct.

Senator CHAFEE. What is happening here is that we are being locked in in perpetuity for ocean dumping for sewage sludge. There is no end to it. I am not being critical, or I am being critical, but the way things are proceeding now, the attitude you are taking is that once they get to the 106-mile limit, it is OK, things are all right.

Mr. JOHNSON. No, I won't say that it is OK in perpetuity. There will need to be permits issued for continued discharge at the 106-mile site.

Senator CHAFEE. Issued by whom?

Mr. JOHNSON. They will have to be issued by the Environmental Protection Agency. In applying for a permit, the municipality will have to provide an analysis of the alternatives that they considered in determining that they needed to take the wastes out to the ocean.

Also, in making our decision, we would follow a policy that was stated in the document that denied the petition to redesignate the 12-mile site. The policy basically says that, as an overall principle, we will be judging applications in such a way as to protect the ocean from significant adverse effects of waste disposal, and we are particularly not going to make the ocean a cheap disposal mechanism.

Senator CHAFEE. Maybe you say that, but that is exactly what is happening.

Mr. JOHNSON. We will be looking at that

Senator MOYNIHAN. Mr. Chairman, could I clarify one point?

Senator CHAFEE. Go ahead.

Senator MOYNIHAN. I don't think that you have the answer. You said that by 1981, the legislation banned ocean dumping, and it didn't, it limited it. It said that you can only do it in the right way.

Mr. JOHNSON. That is correct. It banned anything that would cause an unreasonable effect.

Senator MOYNIHAN. There is a great deal of difference between banning something, and saying, do it in the right way.

Mr. JOHNSON. That is correct.

Senator MOYNIHAN. Thank you.

Senator CHAFEE. In any event, EPA didn't appeal the decision of the judge.

Mr. JOHNSON. That is correct.

Senator CHAFEE. I can't believe that you are going to start denying permits, though, if New York City goes in and makes this very substantial capital investment to build these barges to be ready to go out all 12 months of the year to the 106 miles, so that they will be ready by 1987. I can't believe, in the wildest imagination, that you are going to pull the plug on them in 1990 and say: Look, no more dumping. Does that make sense?

Mr. JOHNSON. I don't know what our decision would be at that time.

Senator CHAFEE. You would have a justifiable ruckus from New York.

Mr. JOHNSON. Yes, we certainly would. On the other hand, the agency is undertaking a number of steps to try to find alternative uses for sludge. We have been doing research in this area and looking at other technologies. We are in the process of developing sludge regulations which will have as a goal using sludge, first and foremost, for beneficial uses not simply disposed. For example, we encourage the use of land spreading and things of this sort where people get some benefits from it. We are implementing a pre-treatment program to try to remove the toxic materials for land disposal.

Senator CHAFEE. If New York City is going to have land disposal, are they going to Central Park?

Mr. JOHNSON. I am not predicting they can, all I am saying is that we are trying to shift the balance over time, so that I couldn't predict.

Senator CHAFEE. What are we getting into here by proceeding in this path? Are other cities lining up? Is Boston looking into this? There must be a great deal more sludge coming about as a result of the increased number of secondary treatment plants that there are in the Nation.

Mr. JOHNSON. That is correct, there is more sludge, but many cities have solved their problems in other ways. Philadelphia, for example, managed to get out of the ocean and find other ways to use its sludge. I don't think, for example, that they will be going back into the ocean.

Senator CHAFEE. Do you have applications on record?

Mr. JOHNSON. No, we do not have any other applications at this time.

Senator CHAFEE. Any other questions of this panel?

Senator MOYNIHAN. I would like to ask one question.

Previously, all sewage was discharged into the ocean. Is that right?

Mr. JOHNSON. Pretty much so. The sewage from coastal cities was probably discharged without treatment at one time to the ocean.

Senator MOYNIHAN. Mr. Chairman, I would just hope that we would not get ourselves, just on the general thing—I am more than content and determined that New York City ceased to do it, but let's not get ourselves into the situation where—In 1965, I think it would be fair to say that all sewage was dumped into the ocean. We came along with the Clean Water Act, and then we produced this treatment process, and now suddenly we are trying to very possibly go beyond what is technologically sensible.

Senator LAUTENBERG. I think it is fair to say we are seeing improvements in some of the marine life and estuaries as we control this stuff.

Is it fair to say that there are also technologies constantly being studied that may be able to reduce the bulk, certainly, and the toxicity, certainly, of this material?

Mr. JOHNSON. Yes, that is correct.

Senator CHAFEE. But the trouble is, each route we go down seems to encounter greater obstacles. We had long testimony, many of you were here, on ocean burning. It is true that it was for hazardous waste, but in some of the testimony, I believe it was yours, Mr. Johnson, didn't you mention incineration as an alternative to the disposal of this waste?

Mr. JOHNSON. I was talking about land incineration in that case. With respect to other waste, ocean incineration could indeed be an alternative.

Senator CHAFEE. Any more questions?

Senator LAUTENBERG. I think, Mr. Chairman, your comments are noteworthy about dead-ending this thing. The fact of the matter is that otherwise we may dead-end a lot of things, a lot of wonderful things that live in our oceans if we don't at least try to move it along to a better dispersal area. What we want, very frankly, along our coast is relief from this junk that floats there, and one way to get it that is reasonably at hand is to move it further away as we study other ways of getting rid of it.

New York City can't be exempt from finding disposal sites any more than New Jersey. Your State was the most densely populated before we captured that honor. So it is hard to find those places. This, as an interim step, I think, is the way to go.

Senator CHAFEE. All right, fine, thank you very much, gentlemen.

The next panel will be Mr. Kenneth Kamlet, director of toxic substances and pollution, National Wildlife Federation, Mr. Curtis, president of the Oceanic Society, and Mr. D. W. Bennett of the New Jersey Clean Ocean Action.

Mr. Dawson, you and I had an appointment, and I am running behind. Are you still going to be available, I think that it will be about 4:15 or 4:30 by the time we are out of here.

Mr. DAWSON. Yes, Mr. Chairman.

Senator CHAFEE. I will see you.

Gentlemen, we really have to move these panels along. The first one, plus Senator Roth, took 1 hour and 15 minutes. Why don't you each take about 4 minutes, again, your statements will be in the record.

Go ahead, Mr. Kamlet.

STATEMENT OF KENNETH KAMLET, DIRECTOR, TOXIC SUBSTANCES AND POLLUTION, NATIONAL WILDLIFE FEDERATION

Mr. KAMLET. Thank you, Mr. Chairman.

I will quickly summarize our seven most important comments and recommendations concerning needed improvements to the ocean dumping law, dealing first with general issues, and then offering some comments on sewage sludge and the New York Bight situation.

No. 1, S. 824, while commendable in most respects, unfortunately fails to fully reflect the carefully crafted compromise among environmental and dredging interests embodied in the oft-passed House bill, H.R. 1957. Specifically, while the bill would protect dredged material dumpers utilizing unstudied or interim-designated dumpsites, until the designation process is completed, it neglects to pro-

vide a mandamus procedure to compel expeditious completion by EPA of individual site designations, and it fails to reaffirm our international treaty obligations under the London Dumping Convention.

I would strongly urge this committee to add such provisions to S. 824, since they were integral parts of the compromise reflected in the House bill, and fundamental to our willingness to support that legislation.

No. 2, S. 824 should incorporate the so-called Carper Amendment from the House bill to make clear that, notwithstanding a 1981 decision by the lowest level of the Federal judiciary, harmful sewage sludge, no matter how devastating to the marine environment, is not fair game for ocean dumping merely because appropriate management on land would be more costly.

This amendment, which is not expected to affect current sludge dumpers is intended to prevent municipalities, not now engaged in ocean dumping, from seeking to dispose of contaminated sludges in the ocean for the first time. The inclusion of precautionary language of this kind would be particularly prudent in the aftermath of the 1984 amendments to RCRA which will limit unsound land disposal practices. Congress must make it clear, it seems to us, that disposal at sea is no more appropriate than disposal on land.

No. 3, NWF strongly supports the concept of user fees in the context of ocean dumping. Such a fee would supplement regulatory control, deter unnecessary ocean dumping, and spur the research and utilization of economical and environmentally sound alternatives.

We would favor not only a permit processing fee and a so-called special fee to cover ancillary site designation and monitoring costs, but also a fee to compensate for the fair market value of the ocean as a disposal site. And, although not strictly a user fee, we would also support the establishment of a delayed compliance fee applicable to sludge dumpers under EPA mandate to shift their dumping from the 12-mile to the 106-mile dumpsite. If the phaseout deadline is missed, a noncompliance fee or penalty should be automatically imposed to offset any economic benefit that is realized from such a delay—to make the requirement self-executing, in other words.

No. 4, the committee's bill should be strengthened to make clear that the ocean dumping law's "citizen suit" provision does not preempt any rights or liabilities that would otherwise exist under other Federal law, including Federal maritime tort law and Federal common law, with respect to damages caused by noncompliance with any MPRSA requirement. This is particularly important in making clear that there is no immunity from a subsequent damage action for toxic pollutants that are dumped in the ocean that are not expressly addressed in an ocean dumping permit.

No. 5, as a final generic issue, the committee may well wish to consider legislatively mandating on a nationwide basis the development of comprehensive dredged material management plans, for at least coastal Corps of Engineers districts. I don't think that this is a concept that the Corps of Engineers would have a problem with either.

No. 6, with respect to sludge dumping in the New York bight, I think the committee has good reason to be skeptical of EPA's 30-

month phaseout timetable, and I hope that it will carefully probe the five issues that I refer to on pages 27 and 28 of my statement.

Whatever deadline the committee seeks to impose in the bill, and I hope it will impose one, it should be a deadline on continued dumping at the 12-mile site, not simply a deadline on continued permit issuance by EPA, because permits can be 3 years in duration, and if the only limit you set is when the permit can be issued, there is too much latitude that can be allowed there.

Finally, No. 7, because dumping tenfold further from land will compound surveillance and enforcement difficulties and significantly increase the likelihood of illegal or inadvertent short-dumping, we urge the committee to require the Coast Guard to reinstate the electronic surveillance system requirement, at least for dumpers at the 106-mile site, which it first proposed in 1979, but then abandoned in 1981, ironically, in part on the expectation that most sludge and industrial waste dumping would end by the end of that year.

Senator CHAFEE. Would you say that again? You went so fast, I wasn't sure what you were saying. What did the Coast Guard do?

Mr. KAMLET. In 1979, the Coast Guard proposed, in the Federal Register, an ocean dumping surveillance system, an electronic black box approach, a device that every ocean dumping vessel would be required to carry, that would include LORAN-C navigational fixes and record automatically when dumping occurred in relation to the position of the vessel. It would be the sort of thing that would enable the Coast Guard to examine a magnetic tape after the dump had occurred to verify that the dumping had in fact occurred at the assigned dumpsite.

Senator CHAFEE. You mean this would be a black box that went on the tug or on the barge, and somehow it would be actuated when the sludge dumped and register on the tape the LORAN-C Fix.

Mr. KAMLET. Correct.

Senator CHAFEE. Then you would just read this and see whether they are in the right place. What are you saying, they gave that up?

Mr. KAMLET. Yes, in 1981, they withdrew that rulemaking proposal, in part because of comments suggesting that the costs were somewhat higher than they had anticipated, but also in large part because of the anticipated end to sludge and industrial waste dumping in 1981, which as we now know never materialized.

Now with the shift to the 106-mile site, the problems of surveillance and enforcement are compounded, and the need for this type of system is especially great.

Senator CHAFEE. Is that what they call the ODSS?

Mr. KAMLET. Yes, ODSS, ocean dumping surveillance system.

Senator CHAFEE. Your time is up. Those suggestions are good.

Mr. Curtis.

STATEMENT OF CLIFTON E. CURTIS, PRESIDENT, OCEANIC SOCIETY

Mr. CURTIS. Thank you, Chairman Chafee.

The Oceanic Society is a 40,000-member, national nonprofit environmental organization that is dedicated to the protection, conservation, and wise use of marine and coastal resources. This hearing provides an important opportunity to examine the role of our oceans in relation to waste management, and to ensure that their "health" and vitality is not jeopardized.

Policies affecting the future of ocean and coastal resources must be developed with environmental consequences as the primary consideration. In its broad design, the Ocean Dumping Act meets this test. With the benefit of better information and regulatory experience, however, the society believes that additional substantive amendments are now needed.

The amendments contained in Senator Lautenberg's bill, in combination with several other amendments, would provide a much sounder statutory framework.

In May 1984, EPA issued a public notice which contains its most recent articulation of the agency's approach to ocean dumping. I have quoted that statement on page 3 of my written testimony. I would like to comment on each of those three bases contained in that statement because they serve to illustrate the need for amendments to the act.

With respect to the first basis, EPA's concern over cheap waste disposal deserves special attention. Marketplace forces standing alone invariably lead to the selection of ocean dumping as the least costly disposal option. Several of the proposed amendments will increase the likelihood that the protection of the oceans will remain the paramount consideration. Others will help redress the marketplace imbalance that favors ocean disposal.

With respect to EPA's second basis, several of the proposed amendments address the need for a showing that no practical alternatives are available that have less impact on the total environment. For some, the oceans continue to be the out of sight/out of mind solution to the problem. As additional constraints are placed on other options, we need to be especially careful that the oceans not be viewed as the easy out.

I was especially glad to hear some of the introductory comments by each of you with respect to concerns for the health of our oceans. Viewing the oceans as the last resort is the only way to ensure that we exercise the necessary caution and restraint in considering that disposal option. In one sense, statutory references to that concept would be redundant since annex III of the London Dumping Convention requires permit applicants to take into account the practical availability of alternatives. However, past experience involving the Corps of Engineers' efforts to exempt themselves from that requirement have necessitated inclusion of an amendment in the House companion bill that provides for a clarification of treaty adherence. That amendment, as well as several others, will aid regulatory officials in their efforts to protect the oceans.

With respect to EPA's third basis, the society strongly endorses that agency's intention to actively encourage hierarchical approaches to waste management. Every effort should be made to utilize waste management options that are at the top of the waste

management hierarchy, moving down only as those higher tiers cannot be accomplished.

The bottom-rung disposal option has its own special problems as we seek the best solutions. While it may be appropriate, for example, for RCRA to severely limit land disposal options for hazardous waste management, it indirectly increases consideration of the ocean option. Have we merely shifted the problem to another precious resource?

Under a hierarchical approach there would be a premium on ensuring that persistent toxic constituents are kept out of the environment entirely, or that they are isolated in controlled environments until they can be destroyed or neutralized.

Implementing an effective hierarchical waste management strategy is not easy but statutory provisions, such as those proposed in S. 824, will advance that objective.

Mr. Chairman, in the context of EPA's statement on the three bases underlying its approach to ocean dumping, I have expressed the Oceanic Society's support for a number of amendments that are needed to refine and improve the act. The specific amendments that we support are set forth in detail as an appendix to my testimony.

Senator CHAFEE. Are you about finished?

Mr. CURTIS. That is the end of my testimony.

Senator CHAFEE. You have those in the appendix, these specific suggestions?

Mr. CURTIS. That is correct.

Senator CHAFEE. All right, thank you, Mr. Curtis.

Mr. Bennett.

STATEMENT OF D.W. BENNETT, CHAIRMAN, STEERING COMMITTEE, NEW JERSEY CLEAN OCEAN ACTION

Mr. BENNETT. My name is Derry Bennett, and I am chairman of the Steering Committee of the Clean Ocean Action, which is a New Jersey-based organization, a coalition of environmental, business, and service organizations, 50 members, and they are listed on the back page.

I want my remarks today to reflect the interests of commercial fishermen who are member of Clean Ocean Action, and have a particular interest in the health of the ocean environment where they make their living. This testimony comes from conversations with working fishermen, from the fishing cooperatives at Belford in Monmouth Counties, and Point Pleasant in Ocean County, which are similar to the Point Judith Coop in your State, Senator.

The fishermen themselves, we tried to have one of them here today, but they are out fishing, dragging in The Mudhole.

Senator CHAFEE. That is where they ought to be. I hope they are having a good day.

This is a varied group. Does Senator Lautenberg know all of these groups?

Senator LAUTENBERG. Yes.

Senator CHAFEE. The Monmouth County Friends of Clearwater.

Senator LAUTENBERG. These are all terrific people.

Senator MOYNIHAN. I love the American Littoral Society.

Mr. BENNETT. It is from the Latin, Senator, of course.

Senator MOYNIHAN. Great imagination.

Senator CHAFEE. What about the Jersey Coast Shark Anglers?

Mr. BENNETT. They tag and return sharks. I went out with them 2 weeks ago, and we didn't catch a thing.

Senator CHAFEE. They do what with sharks?

Mr. BENNETT. They tag and release them, except if they are Makos, then they bring them home and eat them.

Senator CHAFEE. I see.

Senator LAUTENBERG. I would hope, Mr. Chairman, that we have the Staten Island Sport Divers, who would like also, not only to be able to go down, but come up, and that is why they like the water nice and clean, so it is not too heavy when they get back to the surface.

Senator MOYNIHAN. If it is dark, then the sharks can't see them.

Mr. BENNETT. The United Boatmen of New Jersey and New York, there are New York groups on there.

Senator CHAFEE. I see the New Jersey Eastern Surfing Association, northern district, the southern district didn't join.

Senator LAUTENBERG. We don't mean to do that, Mr. Bennett, but I find it very useful to have my colleagues know how diverse and how interested the people of New Jersey are in the sea, and that we have over 3 million fishermen in the State of New Jersey.

Senator CHAFEE. We are all doing this in Mr. Bennett's time.

Senator LAUTENBERG. No, he gets a waiver.

Senator CHAFEE. Why don't you go ahead.

Mr. BENNETT. Under current ocean dumping practices, these fishermen are losing their traditional fishing grounds near shore. Many of their problems can be traced to the unsatisfactory open ocean dumping techniques presently practiced in the New York Bight.

On behalf of the commercial fishermen members of Clean Ocean Action, I appear here today to pass on to you their support of S. 824 to reauthorize and amend the Ocean Dumping Act. In particular, we support the closure of the 12-Mile Site within 18 months, and we support with enthusiasm the New York Bight Apex, Hudson-Raritan Estuary Restoration Plan.

The bight/estuary waters need help, and they deserve it being the neighboring waters for the recreational and commercial interests of tens of millions of people.

We have a number of specific suggestions and comments about S. 824.

(1) We especially commend the inclusion of paragraphs (5) and (6) under section 3, the permit conditions. These paragraphs stress a comprehensive approach to waste management and provide monitoring of dumping.

(2) We disagree with the inclusion of lines 10 through 17, page 2, under section 2, Dumping Permit Program (a)(1) which would permit ocean dumping of pretreated sludge. Our feeling is that if it is pretreated, it is good, and if it is good, it should be used on the land. Barring that, we would favor the less naked version in the House, which does at least ask for alternatives to be looked at.

We urge inclusion in the bill of a user fee schedule. The user fee would impress upon the dumpers the fact that all disposal at sea

has a cost to the public. A user fee would provide an incentive for ocean dumpers to look for land-based alternatives, and it would help pay for the cost of monitoring the restoration plan. Why not put the burden of these costs on the users?

We urge the inclusion of language in the Senate version to allow parties to sue for damages caused by ocean dumping. This is of particular interest to commercial fishermen. New Jersey sea clammers lost in court when their rights to sue for such damages were thrown out.

I said at the beginning of my testimony that it reflected the special concerns of the commercial fishermen. A year ago, Eric Thielman, who fishes out of Point Pleasant, appeared before the House Subcommittee on Oceanography to talk about H.R. 4364. I have attached a copy of his testimony to mine because it is right from the source. I would like to quote one paragraph because it is right on point.

One of the problems that we encounter as a result of sludge dumping is the slime that forms. In recent years, this slime has become extremely thick within what had been some of our best fishing grounds and is moving southeasterly, covering more and more of these grounds. I found traces of this slime in our nets as far as seventy miles offshore recently. This slime, which we once had analyzed as a combination of the natural mud bottom, human hair, fibers from sanitary napkins, and varieties of treated sewage, has a remarkable ability to entwine within our nets, often heavily enough to reduce our working efficiency sometimes up to 100 percent. Occasionally, the slime buildup is sufficient to tear our nets apart or to cause total loss of a net.

Is it any wonder that commercial fishermen support S. 824?

Senator CHAFEE. OK, Mr. Bennett, we thank you very much.

Senator Moynihan.

Senator MOYNIHAN. Mr. Chairman, I thank all three gentlemen for giving us broad testimony on a large subject. We are obviously going to be addressing it and learning more about it.

Senator CHAFEE. Senator Lautenberg.

Senator LAUTENBERG. Nothing, except to thank the witnesses, Mr. Chairman, and to correct out the record. I said that New Jersey had 3 million fishermen, and there are 3 million fishing trips in the State of New Jersey each and every year, and that is about 1 for every 2 persons that live there.

Senator CHAFEE. That is only if everybody takes one fishing trip a year.

Senator LAUTENBERG. That is about it.

Senator CHAFEE. Gentlemen, I want to say that as far as I am concerned, this is a new subject to me. We have been entangled in Superfund, clean water, nuclear regulatory matters, highways, and safe drinking water. I have been on this committee for 8 years, as has Senator Moynihan, and frankly, I don't know about you, Senator, but for myself this is really my first exposure to the problem of ocean dumping. Although we haven't asked you a great deal of questions, what you have said has registered with us, and will arouse our awareness and concern for this whole matter. So your trip has been extremely helpful to me. Thank you very much.

The last panel will consist of Mr. Joseph McGough, commissioner, New York City Department of Environmental Protection; Mr. Schmidt, director of planning, New Jersey Department of Environmental Protection; and Mr. Harper, chairman of the Conference of Coastal Agencies.

Mr. McGough, while the others are getting seated, what do your duties include in New York City, just briefly? This is not part of your presentation, I am just curious?

For instance, you wouldn't have the parks under you?

Mr. McGOUGH. No. The environmental protection, water, waste disposal, hazardous materials, air and noise pollution control.

Senator CHAFEE. But under each of these fields there is somebody who is in charge. For example, there is somebody in charge of the department of sanitation that disposes of sewage, isn't there?

Mr. McGOUGH. My department has bureaus, and there is a bureau chief that is in charge of sewage disposal.

Senator CHAFEE. Are you in charge of the water?

Mr. McGOUGH. The water supply, and the sewage disposal.

Senator CHAFEE. Do you mean that you are in charge of those great tunnels that bring water under the city of New York?

Mr. McGOUGH. Absolutely.

Senator CHAFEE. You have a tremendous responsibility.

Mr. McGOUGH. Yes, sir, I am afraid I do.

Senator CHAFEE. Why don't you proceed. Each of you has 4 minutes.

STATEMENT OF JOSEPH T. MCGOUGH, JR., COMMISSIONER, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. McGOUGH. Good afternoon, Chairman Chafee, and members of the Environmental Pollution Subcommittee.

My name is Joe McGough, and I am the commissioner of the New York City Department of Environmental Protection. I am pleased to appear before you today to report on New York's progress in effectuating the move to the 106-mile ocean disposal site, and to comment, for the record, on the legislation under consideration, S. 824.

Senator CHAFEE. I would summarize, if I were you. You can do as you wish, but in 4 minutes the curtain will drop.

Mr. McGOUGH. Let me just say that we are proceeding, and one of the things that was testified to was that EPA had said none of the dumpers had started earlier. I want to inform this committee that we did start a full 18 months before the decision in April 1984 came down.

As a matter of fact, at that time, in April of 1984, we formally went out with a request for proposal for the disposal of our sludge at the 106-mile site. We received 32 inquiries, and then 9 actual proposals. It was on the basis of those proposals, and all of that work done in preparing those requests for proposals, that we determined and came to EPA later with a 38-month schedule which was then in the course of negotiation with EPA, and has turned out now to be a 30-month schedule.

Let me just say, too, that we will start bringing sludge to sea as early as April 1986, 10 percent. We will choose and have already agreed to take that 10 percent which is the most toxic of our sludges to sea beginning in April 1986, by renovating the only vessel that we now own that is able to go out that far into the ocean. Of our remaining amount of sludge, another 30 percent in June 1987, and another 35 percent in September 1987, and finally

the final 25 percent, making a total of 100 percent, by November 1987.

With respect to the statute itself under consideration, our primary concerns are with those amendments to section 102. Currently, in section 102, there is called for a balancing of the various disposal media, land, air or water, in the designation of a site. That balancing should be carried through when you make the determination to terminate an ocean site, as was testified here earlier by the Corps of Engineers, and even by EPA.

That constant balancing, because we do live in a biosphere, we have to decide what to do with it, and the position of the city of New York is that the city of New York is prepared to do that which is the least environmentally threatening with its sludge.

Right now, based upon all of our research—we have spent millions of dollars over the course of the years researching alternative methods—the most environmentally sound method available to us is currently ocean disposal. It may not always be.

You asked the question about only 5 years, and once we get into the ocean, we will never get out. We are not anticipating being in the ocean forever, and that is one of the reasons why we have selected the barge alternative. If I knew I was going to be in the ocean for 20 years, I would go to a self-propelled vessel so that I would have the payback period, and it would be a lot cheaper. In the anticipation that down the road, we may have to get out of the ocean, because some other technology has come along, for instance, incineration, we have chosen the barge alternative.

So we are prepared, if need be, to get out of the ocean if we can find a safer and sounder environmental alternative for our sludge.

I may also add that all of our sludge meets the EPA criteria. It is not harmful sludge under the definition in Senator Roth's testimony earlier. It meets all the criteria. The main reason it was moved from 12 to 106 is that it was realized, and we admitted this in our application, that it has less of an impact on the environment at 106 than at 12.

Senator CHAFEE. I thought you said that you had some toxicity.

Mr. MCGOUGH. There are toxic elements to our sludge, mainly heavy metals, but that doesn't mean—even the most toxic of our sludge still met EPA criteria, but there are still gradations among the sludges that we produce at our 12, soon to be 14, sewage treatment plants.

I see my time is up. I would like permission to submit my statement.

Senator CHAFEE. You can have 30 seconds more, if you have a couple of key points that you want to make.

Mr. MCGOUGH. I think that the other provision of the House bill that we are concerned about is that the certification, again, that is necessary to be given by the Governor of the State, that no alternative to ocean dumping exists, again, should be a part of the balancing, the comparison, and it seems, as it is now written, to give precedence or at least a presumption against ocean dumping. Again, I think that comparative analysis should be carried through.

Finally, we would ask that the Senate consider an amendment, as was entertained in the House, that those requirements for pre-treatment, the requirement that the dumper be in compliance with

all of the pretreatment requirement be limited to those pretreatment requirements that relate to the quality of the sludge, and not other pretreatment regulations that may be unrelated to the sludge. That was amended in the House, and we would urge you to consider that for amendment to your Senate bill S. 894.

Thank you very much.

Senator CHAFEE. Thank you, Mr. McGough.

Mr. SCHMIDT.

**STATEMENT OF LAWRENCE SCHMIDT, DIRECTOR OF PLANNING,
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Mr. SCHMIDT. Mr. Chairman, and members of the committee, I am pleased to offer testimony on behalf of the New Jersey Department of Environmental Protection. I am here in my capacity as chairman of the department's Ocean Waste Management Committee.

My remarks today will focus on the New York bight, especially those issues involving the disposal of municipal sewage sludge from the New York/northern New Jersey metropolitan area.

First, the State of New Jersey applauds EPA's final rulemaking which, in effect, denied future use of the 12-mile site for disposal of municipal sewage sludge. We also congratulate the nine petitioners affected by the EPA decision for their temperance in not delaying the closeout by legal challenge.

The State of New Jersey continues to support the termination of sludge dumping at the 12-mile site as soon as possible. We further believe that the relocation of sludge disposal to the deepwater 106-mile site is currently the most environmentally sound solution for the nearly 8 million wet tons per year of sewage sludge generated by the 9 affected sewage agencies.

Three weeks ago, Region II of EPA announced that it had negotiated phaseout schedules with the current users of the 12-mile site.

Senator CHAFEE. I have to leave, unfortunately, and I want to apologize to you and to Mr. Harper. In your principal cities in New Jersey, what do you do? What is your largest city, Camden?

Mr. SCHMIDT. It is Newark.

Senator CHAFEE. What does Newark do with its sludge?

Mr. SCHMIDT. It ocean dumps it.

Senator CHAFEE. They ocean dump, too.

Mr. SCHMIDT. Yes. All of the municipalities that are near New York City ocean dump.

Senator CHAFEE. Jersey City?

Mr. SCHMIDT. Jersey City has such antiquated sewage treatment facilities that they don't generate enough sewage sludge to ocean dump.

Senator CHAFEE. It all goes directly into the river.

Mr. SCHMIDT. It is treated, but they dispose of their sewage sludge other than through ocean dumping because the primary treatment process generates a lot less sewage sludge than an advanced wastewater treatment facility such as Passaic Valley, which serves the city of Newark and a lot of our other communities.

Senator CHAFEE. Gentlemen, I apologize that I have to go. Senator Moynihan will assume the chair.

Mr. SCHMIDT. Thank you, Senator Chafee.

As I was saying, although we are disappointed that the negotiating parties could not develop schedules to end all dumping at the 12-mile site within 18 months. After careful analysis of the agreed upon schedules, and in consultation with the EPA, New York City, and the New Jersey authorities, we understand that the agreements represent a realistic and, we hope, firm timeframe for a rapid and orderly phaseout.

The DEP has maintained all along that the phaseout could and should be accomplished within an 18-month period. This projection was predicated on the institutional arrangements necessary for the sewerage agencies to make the transition. Frankly, we did not consider in depth the capability or lack thereof of the marine transportation industry to gear up with vessels, either in the existing fleet and/or new or retrofitted vessels.

The New Jersey authorities are wholly dependent upon the private sector to respond in a timely fashion. If a sufficient number of vessels existed, and if the vessels were seaworthy, and had cost-effective sludge capacity, then we would continue to maintain that the 18-month phaseout is readily achievable.

However, this does not seem to be the case. Clearly, the two most significant reasons for the phaseout schedule adopted are the lack of available vessels to immediately accommodate all nine sewerage agencies, and the lack of private sector incentives to make large capital expenditures based on EPA's 5-year designation of the 106-mile site.

In the absence of a comprehensive, multimedia assessment of all sludge disposal options, the 106-mile site has emerged as the environmentally preferred alternative in the interim. Land-based disposal options are not currently being pursued by the sewerage agencies. Therefore, the 106-mile site needs to be recognized for what it is, the only implementable disposal alternative that has a degree of environmental acceptability.

Recognition should be given to the 106-mile site as an intermediate term-solution. I believe that we may have to consider a review of the designation on 5-year intervals based on the results of environmental monitoring and analysis, without closing out the possibility that the site will continue to be used.

A longer term designation may be what will be necessary in order to attract private investment. Without an intermediate-term commitment, I fear that our goal of total phaseout of the 12-mile site may not be achieved, or achieved only with shocking rate increases.

If the private sector responds to public bidding with only 3 to 5 years of certainty, we presume that the cost will reflect amortization of the capital investment in that contract period. That cost could be so staggering as to be counterproductive to the total phaseout of the 12-Mile Site. EPA and the Congress must address this issue before we get bogged-down in a well-meaning yet unachievable phaseout process.

The State of New Jersey has supported the general reauthorization provisions of the Ocean Dumping Act in the House of Representatives, and we continue to support the efforts in the Senate. We find the Ocean Revitalization Act of 1985 to be generally com-

plimentary to the legislation moving forward in the House of Representatives.

I would like to take the final few moments to comment on several aspects of this bill.

The State continues to support the concept of a New York Bight Apex restoration plan. Senator Lautenberg's bill goes a step beyond and widens the study effort to include the Hudson-Raritan Estuary. We endorse this expansion of the original concept since we have maintained for quite some time that the greatest factor influencing environmental degradation within the Bight Apex is the estuarine effluent discharge plume. This plume consists of billions of gallons of freshwater runoff, treated and untreated wastewater, urban runoff, agricultural runoff, and toxic discharges of an accidental, inadvertent, or illegal nature.

We welcome a Bight restoration planning process that will focus on the combined activities of man on land as it subsequently affects the ocean and its living marine resources.

In our testimony on H.R. 1854, we specifically asked that language be added that would give the affected States a more active role in the preparation of the plan and in the decisionmaking process on policy aspects of the Bight restoration strategy.

The success of implementing a plan will require the full support and cooperation of the States of New York and New Jersey, and New York City. We ask that your subcommittee give favorable consideration to our request, and that we be given responsibility to work with EPA in the planning process.

I will conclude here. I have additional comments, but they are of a technical nature.

Senator MOYNIHAN. We will put the whole statement into the record. This turned out to be more interesting and more complex than we knew.

Senator MOYNIHAN. Now Mr. Harper on behalf of the Conference of Coastal Agencies.

STATEMENT OF FRED HARPER, CHAIRMAN, CONFERENCE OF COASTAL AGENCIES

Mr. HARPER. Thank you, Senator Moynihan.

Gentlemen, my name is Fred Harper, and I am the former general manager of the Orange County Sanitation District in California. Currently, I am a part-time special assistant to the new general manager. I am here today in my capacity as chairman of the Conference of Coastal Agencies, a group of 14 coastal sewerage authorities serving approximately 20 million people on both the east and the west coast of the country.

CCA is a committee of the Association of Metropolitan Sewerage Agencies. We have prepared a lengthy statement, which we would expect to go into the record.

Our interest in amendments to the MPRSA is their effect on our ability to select the most environmentally sound method to ultimately dispose of sewage treatment residuals. Unfortunately, such management is affected by five Federal laws: The Clean Water Act, the Resource Conservation and Recovery Act, the Toxic Substance

Control Act, the Clean Air Act, and MPRSA, and one medium is often protected at the expense of others.

Sludge can either be a resource or a disposal problem, depending on many factors: sludge quality, reuse possibility, and volume. In urban areas, reuse possibilities are frequently limited, such as you were discussing in New York. Transport into other jurisdiction is often impossible because of the not-in-my-backyard syndrome.

Air quality restrictions often rule out incineration and other processes that create air problems.

The objective of CCA with regard to legislation is to keep all of the sludge management alternatives available to local agencies and to encourage EPA to develop its regulations to consider all sludge management options, realistic cross-media risk assessment and analysis, and the need to improve public perception.

We are pleased that since June 1984, the Congressional Office of Technology Assessment, [OTA], has been preparing an assessment of ocean waste disposal. We understand this study will address a number of materials being put into the ocean, including sewage, sewage effluent, and sludge. In addition, the report will attempt to provide a comparison of ocean-based technology with land-based alternatives.

Sewerage agencies are mandated by existing law to require industry to pretreat their discharges into municipal systems. The agency that I represent in Orange County has had good results, and we have included a graph of some of the reductions in heavy metals and other toxic materials in our formal statement.

With respect to MPRSA, we have the following comments: We support the idea that EPA should designate all ocean sites for sludge disposal formally after a detailed environmental assessment. We strongly urge deletion of the existing language in the act which provides that sites be designated wherever feasible locations exist beyond the edge of the continental shelf. Our scientific advisers tell us that that doesn't really have a good scientific or technical foundation, and that each site should be examined on the basis of the best information.

We support a requirement for EPA to monitor periodically designated sites by estimating future inputs, and by updating those estimates every 5 years.

We have consistently endorsed the concept of user fees to be collected from operating sewerage agencies, limited to the actual expense to the Federal Government.

We are concerned about the user fee language that was adopted in the House bill, and we urge the subcommittee to look at that. We feel that it is too vague.

We strongly oppose, though, punitive user charges.

We not only support the concept of monitoring, we practice it. However, there is a considerable range of discretion as to what is useful in the monitoring program.

We support the development of a massive restoration plan for the New York Bight Apex and for other areas that may need such plans.

Lastly, we support a greatly stepped up research effort to determine the beneficial uses of sludge, particularly when applied to the ocean. It is our contention that properly designed ocean manage-

ment alternatives can be developed, which will promote and ensure the beneficial uses of sludge in the ocean just as good reuse plans provide benefits on land.

Thank you.

Senator MOYNIHAN. Sir, we thank you very much for a refreshingly comprehensive statement, with a little reference to other parts of the world and the New York bight. Orange County really has had a successful management program. It did not come easy, you had to work at it.

The heavy metals come out of industrial uses.

Mr. HARPER. That is exactly right. The only place we found any increase has been in silver, and we figure that is from the hobbyist at home, developing his film. So we are doing quite a bit of public information dissemination to try to get them to bring the material to a central place where it can be handled properly.

Senator MOYNIHAN. That is a nice bit of tactic work, finding out where the silver is coming from. You are saying, take it to the drug store, and don't do it at home.

Senator LAUTENBERG. It falls out of their pockets in Orange County.

Mr. HARPER. Maybe if the price would go up a couple of dollars that would change.

Senator MOYNIHAN. I take it that you two gentlemen are a lot closer in agreement than we would have expected. You obviously want to do this, you are going to do it, and you have a schedule that you are going to do it on.

You are worried that if we don't make a somewhat more permanent commitment to this 106-mile site, you are not going to get anyone to build those barges for you. Is that it, sir?

Mr. SCHMIDT. I am one of the few people on this panel who doesn't represent an agency that has a vested interest in sludge disposal. We are an environmental regulatory agency. Our primary concern is to get the sewage sludge out of the 12-mile site as soon as possible.

Although the negotiated agreements are well meaning, we have concerns that even with penalties, the incentive to stay at the 12-mile site is very big economically. The cost differential between the 12-mile site and the 106-mile site could be as much as \$36 million a year.

Senator MOYNIHAN. There aren't going to be any penalties, you are going to do this, aren't you?

Mr. MCGOUGH. Absolutely.

Senator MOYNIHAN. New Jersey is going to do it, too.

Mr. SCHMIDT. We can do it if the private sector responds. New York City is different. New York City has taken its own initiative to build vessels, and it has some certainty that can control its own destiny. New Jersey is wholly dependent upon the private sector.

Senator MOYNIHAN. These are small municipalities, and this is a form of trucking. They are going to be common carriers. They will come around and take care of this municipality and that. Is that it?

Mr. SCHMIDT. Exactly.

Senator MOYNIHAN. This is going to be a private thing.

Mr. SCHMIDT. The existing trucking company does not have enough trucks, and we are hoping that they will buy more.

Senator MOYNIHAN. And if it doesn't look like it is going to be profitable, they won't do it.

Mr. SCHMIDT. Possibly. We are hopeful.

Senator MOYNIHAN. Then that is something to be attentive to.

Senator LAUTENBERG.

Senator LAUTENBERG. Thank you, Mr. Chairman.

Mr. Schmidt is from New Jersey, as you know. Mr. McGough and I have talked about various things.

The difference in view is that, Mr. Schmidt, you said New Jersey saw its way clear in its evaluation to believe that the ending of the dumping at the 12-mile site could be accomplished. You did say that you didn't look in detail at some of the problems involved with vessels, and so forth. Mr. McGough, you said that you had been working on this thing, you didn't wait until the last days to get it done. How long did you say you had been working on it?

Mr. MCGOUGH. About 6 months before the determination was announced by EPA, we had a pretty good feeling that EPA was going to announce their intention back in April of 1984. So we put together a team of people in the department to begin to look at how we could approach this problem of going to the 106-mile site.

When the EPA announced, in April of 1984, their intention, not their decision, this is more than a year ago, we began to write the request for proposal subsequent to April.

Senator MOYNIHAN. To build the vessels?

Mr. MCGOUGH. Yes, we had a very, very broad proposal, we simply said, anybody who thinks they have a solution of getting our sludge to 106-mile, even a part of it, not all of it, come in and tell us what your proposal is, what are your costs, and so on.

That proposal was sent out to people before the decision was made. In fact, we had all of the proposals in house by December of 1984. Before that decision was announced in April of 1985, we had already come to a conclusion that the medium size barge approach for the city of New York was the most appropriate.

Senator LAUTENBERG. How far have you gotten in the development of the proposal?

Senator MOYNIHAN. Frank, would you forgive me, I have an appointment and I am already a half-hour late now, would you take over the Chair.

Senator LAUTENBERG. This is how I get to be chairman.

Senator MOYNIHAN. I want to thank our neighbors, but I particularly want to thank Mr. Harper for coming all the way from Orange County. We have learned a lot from him.

Senator LAUTENBERG. How far have you gotten in terms of either letting contracts, making plans, citing delivery possibilities?

Mr. MCGOUGH. The first thing we have to do—we have many things going on at the same time, amongst them includes, first of all, an assessment of what has to be done to our largest vessel to be ready by April to take the 10 percent of our worst sludge out. That is now ongoing. Immediately upon the heels of that consultant's report will come the construction and outfitting of that vessel to make it able to go out to 106-mile, more crew quarters, and other navigational things have to be put on board.

In tandem with that, we have hired a consultant to write up a performance specification for the barges. That consultant will produce that document, and we will then contract out, through a contracting procedure, to have those barges designed, structured and delivered under the schedule that I covered in my testimony—the first one in June 1987, the next one in September 1987, and the last one in November 1987.

Senator LAUTENBERG. When will the contract be let in order to meet that date?

Mr. MCGOUGH. I believe they have to be let right around the end of this year or the beginning of next. Around January or February 1986, the contracts for the design and construction of those barges have to be let.

We have also hired an operations research firm to help us with the logistics of how we collect all the sludge from our 12 treatment plants, and how we pick it up and get it to these barges, or use the barges to go and get it, and what the schedule will be, for the purpose of determining how much storage space we will have to acquire, or later construct for inclement weather, or what are the chances of a 3-day hurricane, and things like that.

We have hired a firm to look at all of those alternatives and do a risk analysis for the adjustments and fine-tuning. All of this is going on. We are 4 months into the process. We have a team that has been put together that is working on this on a day to day basis.

Senator LAUTENBERG. I would hope, Mr. McGough, that the letting of the contracts would begin to take place soon because Chairman Chafee expressed his concern that what happens is that these things finally get to be constructed at a point when there is not much time left for its use; when people are making decisions about closing down ocean dumping.

I know that you are serious, and I know that the city is serious in wanting to comply, but it has to get going.

Mr. Schmidt, in New Jersey, what provisions do we have in the event that the private sector doesn't snap up this opportunity?

Mr. SCHMIDT. The six New Jersey authorities have banded together. They are hoping to be able to award a contract for one marine transportation company to do everything. They are now in the process of developing the technical specifications that will require the successful bidder to take 25 percent of the sewage sludge to the 106-mile site starting, I think, in May 1986. The successful bidder must also be able to take the remaining 75 percent to the 106 by the end of 1987. In order to do the contracting, they first require legislation at the State level in order to amend contract law to allow this to occur.

It is a bit of a gamble because, for example, Nassau County and Westchester County will get 100 percent of their sludge out, as I understand it, in 1986. If those counties award contracts to the only available vessels in the existing fleet, then New Jersey would have to, hopefully, get new blood in the industry, someone to come in who would have the capability of transporting it. It will be a very large and very lucrative contract, and we are hoping that the private sector will respond, but there is no guarantee, sir.

Senator LAUTENBERG. I hope so, because our bill does call for sludge dumping to end at the 12-mile site 18 months after enact-

ment, and we intend to continue to press that. I don't want to discuss reasonableness, it is a subject that has been on the table long before I arrived in the Senate, but we are going to push that.

I would urge my own State, as well as New York, to get on with it. This is something that is happening, and it is very clear that it has to happen. I would urge expeditious treatment wherever we can get it.

I have a bunch of questions that we will submit to each one of you in writing and we would ask for your response.

Is La Palma in Orange County?

Mr. HARPER. Yes, sir, it is.

Senator LAUTENBERG. Do you know La Palma?

Mr. HARPER. Yes.

Senator LAUTENBERG. Did you ever see the ADP office in La Palma?

Mr. HARPER. No.

Senator LAUTENBERG. It is quite a company, a New Jersey based company that I knew very well.

We thank you all for being here. We will be submitting a statement from the Bergen County Utilities Authority for the record. It is the testimony of Mr. John G. Costello, executive director. He has asked that we put this in the record. Without hearing any objection from anybody else on this side of the table, I will do that. (See p. 242.)

We thank you all for participating, and we will adjourn this hearing.

[Whereupon, at 4:16 p.m., the subcommittee adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bills S. 824 and S. 1502 follow:]

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COMMITTEES
GOVERNMENTAL AFFAIRS (CHAIRMAN)
FINANCE
JOINT ECONOMIC COMMITTEE
JOINT COMMITTEE ON TAXATION
SELECT COMMITTEE ON INTELLIGENCE

United States Senate

WASHINGTON, DC 20510

STATEMENT OF

SENATOR WILLIAM V. ROTH JR.

HEARING ON OCEAN DUMPING

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

JULY 29, 1985

THANK YOU MR. CHAIRMAN

I APPRECIATE HAVING THE OPPORTUNITY TO SPEAK TODAY AND TO EXPRESS MY CONCERNS ABOUT AN ISSUE THAT IS VERY IMPORTANT TO THE PEOPLE OF DELAWARE. I SPEAK FOR THEM WHEN I AGAIN ISSUE MY DECLARATION THAT I AM OPPOSED TO OCEAN DUMPING.

MY GOAL MR. CHAIRMAN, IS TO MAKE SURE THAT OCEAN DUMPING OF HARMFUL MUNICIPAL SLUDGES WILL HALT AS SOON AS POSSIBLE. I DIDN'T LIKE OCEAN DUMPING YESTERDAY, I DON'T LIKE IT TODAY, AND I WON'T LIKE IT TOMORROW.

I APPLAUD EPA'S RECENT DECISION TO DENY PETITIONS TO REDESIGNATE THE 12 MILE SITE FOR SEWAGE SLUDGE DISPOSAL. HOWEVER I AM VERY DISTRAUGHT WITH THE FACT THAT THE ORIGINAL VERY REASONABLE 12-18 MONTH PHASEOUT PERIOD

HAS BEEN EXTENDED UNTIL DECEMBER 1987. I FIND IT HARD TO BELIEVE THAT THOSE COMMUNITIES FACED WITH THE IMPLEMENTATION OF ALTERNATIVE DISPOSAL OPTIONS HAD DIFFICULTIES IN MEETING THIS DEADLINE, ESPECIALLY SINCE WE HAVE BEEN ATTEMPTING TO ESTABLISH REGULATIONS FOR OCEAN DUMPING, AND THE PHASE OUT OF OCEAN DUMPING SINCE AS EARLY AS 1971. I COMMEND THE CITIES OF PHILADELPHIA AND CAMDEN FOR PHASING OUT OCEAN DUMPING BY 1981.

MR. CHAIRMAN THERE IS AMPLE EVIDENCE THAT MANY PROPERLY TREATED MUNICIPAL SLUDGES HAVE AN ENVIRONMENTALLY SAFE ALTERNATIVE USE EITHER AS A SOIL ADDITIVE OR CHEMICAL FERTILIZER SUBSTITUTE. WE MUST TAKE ALL OPPORTUNITIES TO USE THIS ENVIRONMENTALLY SAFE DISPOSAL METHOD FOR OUR BENEFICIAL USE. WHY DOES OUR SOCIETY KEEP THINKING OF THE OCEANS AS SUCH A WONDERFUL PLACE FOR THE DISPOSAL OF WASTES?

ALTHOUGH I AM PLEASED WITH THE REDESIGNATION DECISION I AM VERY CONCERNED WITH EPA'S DECISION TO DESIGNATE TWO DISPOSAL SITES WITHIN THE 106 MILE OCEAN WASTE DUMP SITE. DUMPING AQUEOUS INDUSTRIAL WASTES AT ONE SITE AND MUNICIPAL SLUDGES AT ANOTHER SITE WILL CREATE A DIFFICULT MONITORING PROBLEM. IF THE MARINE ENVIRONMENT WERE

TO BE ADVERSELY AFFECTED. IT WOULD BE VERY DIFFICULT TO DETERMINE A CAUSE.

MR. CHAIRMAN, ALTHOUGH IT APPEARS THAT I HAVE COME HERE TO EXPRESS MY DISPLEASURE WITH THIS "DISPOSAL" OPTION BEFORE US TODAY, I HAVE ALSO COME TO PROVIDE THE COMMITTEE WITH FOUR AMENDMENTS TO TITLE I OF THE OCEAN DUMPING LAW. I INTEND TO SUBMIT THESE AT A LATER DATE.

IN BRIEF, THE FIRST AMENDMENT I INTEND TO OFFER, WOULD PROHIBIT THE OCEAN DUMPING OF HARMFUL MUNICIPAL SLUDGE BY ALL DUMPERS WITHIN 18 MONTHS OF THE BILL'S ENACTMENT. FURTHERMORE, NO DUMPING OF HARMFUL MUNICIPAL SLUDGE BY NEW DUMPERS WOULD BE PERMITTED DURING THAT 18 MONTH PERIOD. MR. CHAIRMAN, "HARMFUL MUNICIPAL SLUDGE" WOULD BE ANY SLUDGE WHICH FAILS THE EPA'S ENVIRONMENTAL CRITERIA. THESE CRITERIA ARE ALLREADY SPELLED OUT IN REGULATIONS DEVELOPED TO IMPLEMENT TITLE I OF THE LAW. THE EXISTING PROCEDURES FOR DETERMINING THE HARMFULNESS OF MUNICIPAL SLUDGES WOULD NOT BE COMPROMISED BY THIS LEGISLATION.

MY SECOND AMENDMENT WILL ESTABLISH A USER FEE SYSTEM UNDER THE OCEAN DUMPING LAW. UNDER THIS AMENDMENT

THE ADMINISTRATOR SHALL PRESCRIBE AND COLLECT AN APPLICATION FEE IN AN AMOUNT COMMENSURATE WITH THE COSTS INCURRED OR EXPECTED TO BE INCURRED BY THE ADMINISTRATOR IN PROCESSING PERMITS. THIS AMENDMENT WOULD DIRECT THE ADMINISTRATOR OF THE EPA TO RECOVER THE FEDERAL COSTS ASSOCIATED WITH OCEAN DUMPING ACTIVITIES SUCH AS SITE DESIGNATION, MONITORING AND SURVEILLANCE. MR. CHAIRMAN, THIS SPECIAL FEE WOULD BE A CLEAR SIGNAL THAT THE USE OF THE OCEANS FOR WASTE DISPOSAL SHOULD NOT BE "FREE". THOSE COMMUNITIES WHO WISH TO TAKE ADVANTAGE OF THE DISPOSAL OPTION AND USE OUR VALUABLE OCEAN RESOURCE AS A DUMPING GROUND, SHOULD BEAR THE COST OF ENSURING ITS CONTINUED HEALTH.

THIRDLY MR. CHAIRMAN, IT IS MY OPINION THAT ANY FUNDS AUTHORIZED UNDER TITLE I OF THE OCEAN DUMPING LAW SHOULD NOT BE USED TO FINANCE THE DUMPING OF MATERIAL OR THE TRANSPORTATION OF MATERIAL AUTHORIZED FOR DUMPING. THIS SHALL INCLUDE THE ALL FEDERAL FINANCIAL ASSISTANCE POLICIES FOR THE CONSTRUCTION OF VESSELS RELATED TO OCEAN DUMPING

FINALLY MR. CHAIRMAN, I FEEL THAT ANY MUNICIPALITY THAT AT THE PRESENT TIME DOES NOT PARTICIPATE IN THE OCEAN DUMPING OF HAZARDOUS MUNICIPAL SEWAGE SLUDGE

SHOULD NOT BE PERMITTED TO DO SO. IT IS MY INTENT THAT ALL MUNICIPALITIES TAKE A GOOD AND HARD LOOK AT THE ENVIRONMENTALLY SOUND AND PRACTICAL ALTERNATIVES PRESENTLY AVAILABLE AS THE OCEAN DUMPING OPTION SHALL NOT BE MADE AVAILABLE TO THEM.

MR. CHAIRMAN, IT IS TIME WE TAKE A SERIOUS LOOK AT RESPONSIBLE LAND DISPOSAL ALTERNATIVES. THE MEASURES I HAVE JUST DESCRIBED WILL PROVIDE AN INCENTIVE FOR MUNICIPALITIES TO MAKE GOOD EFFORTS TO CLEAN UP SLUDGES THROUGH INDUSTRIAL PRETREATMENT, AND WILL MAKE THOSE PAY FOR THE PRIVILEGE OF DUMPING SLUDGE IN THE OCEAN.

SINCE THE EPA HAS NO SEWAGE SLUDGE DISPOSAL EDUCATION PROGRAM, AND BECAUSE IT IS MY INTENT TO STOP OCEAN DUMPING ALTOGETHER, WE MUST HAVE A GOOD PUBLIC EDUCATION AND INFORMATION PROGRAM AVAILABLE. ADEQUATE FUNDS SHOULD BE APPROPRIATED FOR THIS CAUSE, TO EITHER THE EPA, DOE, OR BOTH

THIS CONCLUDES MY TESTIMONY MR. CHAIRMAN, AND I THANK YOU FOR THE OPPORTUNITY TO HAVE SPOKEN TODAY, AND I LOOK FORWARD TO WORKING WITH THE COMMITTEE TO RESOLVE THE OCEAN DISPOSAL ISSUE.

STATEMENT OF
MR. EDWIN L. JOHNSON
ACTING DEPUTY ASSISTANT ADMINISTRATOR FOR WATER
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

JULY 30, 1985

Good afternoon, Mr. Chairman and Members of the Subcommittee. I am Edwin L. Johnson, Acting Deputy Assistant Administrator for the Office of Water, United States Environmental Protection Agency. With me today is Dr. Tudor Davies, Director of the Office of Marine and Estuarine Protection.

I am pleased to be here today to describe to the Subcommittee the status of the Agency's Ocean Dumping Program and to present the Agency's position on S. 824 and reauthorization of Title I of the Marine Protection, Research, and Sanctuaries Act.

PROGRAM STATUS

One of the highest priorities within the Office of Water in the past two years has been to strengthen the Agency's management of marine protection programs. In pursuit of this goal, we have sought advice and counsel from Members of Congress, as well as from other members of both houses of Congress and a variety of people within the executive branch of government. We are grateful for the guidance and assistance provided to us. Through these discussions and others with senior EPA managers, it became apparent that there was both the need and support necessary to consolidate and

organize marine programs within one office. The intent was to provide a mechanism to ensure that our valuable and important coastal, estuarine and ocean waters receive increased attention from senior Agency management and appropriate consideration in our planning and budget processes. The Office of Marine and Estuarine Protection was established within the Office of Water to carry out this purpose and is under the direction of Dr. Davies.

During FY 1986 and the remainder of FY 1985, the Office of Marine and Estuarine Protection will conduct several major activities. In accordance with our statutory mandate, we will continue reviewing and issuing permits for ocean disposal and EPA will also continue to review dredged material disposal permits issued by the Corps of Engineers.

In the area of site designation and monitoring, the program will conduct surveys of interim and existing ocean disposal sites for site designation purposes and will determine the environmental impacts of disposal. We will accelerate the preparation of environmental assessments to support site designations. The Deepwater Municipal Sludge Dump Site (more commonly known as the 106-Mile Site) will be monitored in accordance with a comprehensive monitoring plan to determine the environmental impacts of dumping at the site. In cooperation with EPA's Office of Research and Development, the National Oceanic and Atmospheric Administration and the Corps of Engineers, we will also continue efforts to examine scientific parameters for the site selection and designation process and the assessment of permittee wastes.

The program will continue to implement ocean dumping regulations in accordance with the 1981 City of New York v. EPA court decision, which ruled that the Agency must consider the comparative human health and environmental effects of land versus ocean disposal in considering an ocean disposal permit application. At the same time, we will develop revisions to the regulations to provide for further guidance on balancing the environmental effects of ocean and land disposal methods, while meeting specific environmental requirements established by the statute.

We will also continue major efforts relating to incineration of hazardous wastes at sea. We are currently evaluating public comments on a proposed rule which would provide specific criteria for the Agency to use in reviewing and evaluating ocean incineration permit applications and in designating and managing ocean incineration sites. In addition, we are undertaking a research program in conjunction with the Office of Research and Development which will provide EPA with further information on incineration emissions and any effects on the marine environment.

12-MILE SITE/106-MILE SITE

On April 1, 1985, EPA denied petitions to redesignate the 12-Mile Site in the New York Bight Apex. EPA has consistently worked towards meeting the goal of preventing unreasonable degradation of the Nation's marine environment. Based on this goal, the current state of the environment in the New York Bight Apex, and

off-the-Shelf ocean disposal site, EPA has determined that further contamination of the nearshore area by municipal sludge dumping is no longer justifiable, nor is it permitted by statutory and regulatory criteria. This follows EPA's emphasis on protecting valuable estuarine and coastal waters from dispersive materials.

The cessation of municipal sludge disposal at the 12-Mile Site along with the implementation of other Agency and state programs will help to improve the overall quality of these waters which serve as a source of food and provide recreation for millions of people annually and are vital to the economic well-being of the entire New York and New Jersey metropolitan area. The other Agency and state programs include:

- (1) a major increase in state and local efforts to construct improved sewage treatment facilities serving the New York - New Jersey communities in the vicinity of the Bight;
- (2) actions on 301(h) marine discharge waiver applications. Of 31 applications for 301(h) marine discharge waivers into the New York Bight, 18 applications have been denied on a final basis, 12 have been withdrawn, and 1 has received tentative denial;
- (3) substantial reductions of other dumping activities in the Bight such as cellar dirt and acid wastes;
- (4) establishing a volumetric guideline of 100 million cubic yards for disposal of dredged material at the Mud Dump Site, and investigating alternative dredged material sites;

- (5) studying point source pollution control of combined sewer and industrial discharges to reduce overall inflow of pollutants to the Right; and
- (6) continued cooperative agreements with NOAA and the Corps of Engineers to monitor the Right to assess impacts of reduced disposal in the Right.

Now that EPA is closing the 12-Mile Site, the consent orders require municipalities to take all steps necessary for a rapid and orderly shift of their municipal sludge dumping operations to an alternative site designated by EPA. This alternative site is the Deepwater Municipal Sludge Dump Site (106-Mile Site) which EPA designated on May 4, 1984. Under the orders, dumping at the 106-Mile Site may continue until a final determination is made by EPA on the municipalities' permit applications.

The Administrator of EPA Region II, who has been delegated the permitting authority for ocean dumping permits at the 12-Mile Site and the Deepwater Municipal Sludge Dump Site, is actively pursuing efforts to transfer dumping to the Deepwater Site. Region II has recently completed negotiations with existing dumpers to establish schedules for the rapid and orderly removal of dumping operations from the 12-Mile Site. We expect the phaseout will begin in Spring 1986 and that all dumping at the 12-Mile Site will be eliminated by the end of 1987.

We have joined with NOAA in developing a monitoring strategy for the Deepwater Site involving a hierarchy of monitoring activities: compliance, near-field, far-field, marine resource and oceanic process monitoring. Our FY 1986 budget request includes approximately \$1 million to monitor dumping activities at the site. This program will begin with baseline monitoring before dumping begins and will intensify after dumping commences. EPA and NOAA will also continue monitoring of the 12-Mile Site to record anticipated environmental recovery.

In addition to the scientific aspects of monitoring, we think that the U.S. Coast Guard's surveillance and enforcement activities provide an essential link in monitoring programs. Verification of models requires accurate information that dumping is occurring at the location set forth in permits, information that is obtained from U.S. Coast Guard enforcement and surveillance activities. Coast Guard efforts to develop a shipboard "black box" which will automatically telemeter transit and dumping operations to shore-side command centers will dramatically improve surveillance efforts and provide important information for monitoring activities.

AUTHORIZATION PROPOSAL

We believe that the current Act provides a workable approach for evaluating and managing ocean disposal activities. Therefore,

the Administrator has requested a two-year reauthorization of Title I of the MPRSA at a funding level of \$8,863,800 for FY 1986 and "such sums as may be necessary" for FY 1987. The increase over the FY FY 1985 appropriation reflects support for establishment of an environmentally safe incineration-at-sea program, monitoring of deep water disposal sites, and establishment of a comprehensive, integrated approach to ocean disposal.

As stated in my testimony of July 10, 1985 on H.R. 1957, we would also support an amendment providing the Administrator discretion to adopt a user fee system for recovering the program costs of ocean disposal.

COMMENTS ON S. 824

Section (2)(a)(1) would place additional requirements on municipal sludge dumpers by requiring compliance with all pretreatment requirements of sections 307(b) and 402(b)(8) of the Clean Water Act. EPA strongly supports implementation of a strong pretreatment program, but has reservations about the proposed requirement. While pretreatment can be an important factor in improving the quality and reducing the risk of sewage sludge for reuse and disposal, there is sufficient authority to enforce these requirements under the Clean Water Act and to consider violations which may be relevant to ocean disposal. Additionally, not all instances of non-compliance with pretreatment program requirements necessarily result in adverse effects to the quality of municipal sludge, e.g., administrative requirements related to reporting and recordkeeping.

EPA does not support the provision of section 2 which would make mandatory the Administrator's present discretionary authority to designate recommended dumpsites. While it is the Agency's position that designation is the procedure that will most often be used, we believe that it is preferable to retain existing flexibility. Interim designations may be needed in the future to cover such activities as one-time, short-term, research and emergency dumping. In addition, the use of interim designations allows us to address priority sites rather than utilizing resources on sites which are used on an infrequent basis. We think that the monitoring requirement and the determination of a site's suitability for continue dumping are unnecessary since existing authority and operating procedures are already adequate to insure that these important dumpsite management activities take place.

The EPA believes that the "grandfathering" provision of section 4 would be necessary if the mandatory site designation provision of section 2 or the provision in section 7 establishing a site designation schedule were enacted. However, EPA opposes the relevant portions of section 2 and all of section 7.

The EPA believes that the section 6 penalties should be made consistent with the position that the Administration proposed in amendments to the Clean Water Act and which was adopted by the Senate when it passed S. 1128 on June 13. There, the penalty for knowingly making false statements, representations, and certifications, or tampering with monitoring equipment would be a felony punishable by two years' imprisonment.

Section 7 would require EPA to establish a schedule to be submitted to Congress within 180 days, to complete the designation of sites used on an interim basis and pursuant to court order. The Agency does not support scheduling the designation of all the remaining sites, most of which are dumpsites which are used on an infrequent basis for the disposal of dredged material from harbor and channel maintenance projects.

There are a substantial number of dredged material disposal sites nationally. Many of these sites are designated on an interim basis and are being studied by EPA and the Corps of Engineers. These studies focus on what are believed to be priority sites based on historical use data.

Appropriate studies on all these sites will require many years and will depend upon resources and legislative and regulatory processes. EPA is already proceeding as expeditiously as practicable in light of these limitations. It is necessary to have flexibility to adjust schedules to reflect changes in program priorities. The Agency develops annual program plans in keeping with available resources and priorities.

EPA supports the concept embodied in section 8 which would close the sludge dumpsite in the New York Bight Apex; however, we do not believe that it is necessary to impose a statutory deadline. We have negotiated phaseout schedules with existing municipal sludge dumpers. The phaseout schedules call for an incremental decrease in the volume of municipal sludge to be dumped at the

12-Mile Site. EPA expects that full transition from the 12-Mile Site to the 106-Mile Site can be made by December, 1987. EPA believes that a mandated 18 month phase-out period for the 12-Mile Site could result in the choice of a less than cost-effective method of transporting sludge to the 106-Mile Site.

EPA believes the New York Bight Apex has been extensively studied and major categories of pollutants have been identified. A new study to mitigate the water quality problems of the Bight is not needed at this time. EPA believes that further consideration of any restoration plan should await movement of dumping operations and completion of construction of shoreside waste treatment projects funded under the Clean Water Act that are now well underway. When these activities are completed, we will then be in a position to consider whether additional steps are necessary and we will evaluate if a comprehensive restoration plan would be beneficial and, if so, what elements should be included in such a plan.

I appreciate your interest in EPA's ocean disposal program and would be glad to respond to any questions you might have.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
EXTERNAL AFFAIRS

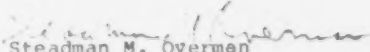
Honorable John H. Chafee
United States Senate
Washington, D.C. 20510

Dear Senator Chafee:

Enclosed are the Environmental Protection Agency's responses to your questions arising out of the July 30, 1985 hearing on S. 824, the Ocean Revitalization Act of 1985".

If I can be of any further assistance, please feel free to contact my office.

Sincerely,


Steadman M. Overman
Director
Office of Legislative Analysis

1. Question: In EPA's draft regulations you stated that the Agency will only allow ocean dumping if the applicant can show that no practicable alternatives are available that have less impact on the total environment. How do you make such a determination -- what is the "total environment". How would ocean dumping ever be prohibited under this broad policy?

Answer: The determination of "practicable alternatives" and the definition of "total environment" must be discussed in the context of the Agency's ocean dumping policy. The portion that is cited in the question is part of the ocean dumping policy that the Agency developed in response to the City of New York v. EPA lawsuit. The policy was initially stated in our May 4, 1984 Notice of Tentative Denial of Petitions to Redesignate the 12-Mile Site (49 FR 19042) and has been reiterated in draft proposed revisions to existing regulations which respond to the City of New York decision.

As a general principle, the Agency is committed to reducing the aggregate risk to human health and the environment from all forms of waste disposal. In particular, EPA strongly encourages the use of technologies to recycle and reuse waste. Ideally, if disposal is necessary, it should take place in a manner and medium resulting in the least adverse environmental impacts. Consistent with this intent, the Agency's general approach to ocean dumping may be summarized as follows:

- (1) The Agency will, as an overall principle, protect the ocean from significant adverse effect of waste disposal. The Agency will particularly assure that the ocean is not used for "cheap" waste disposal as a matter of short run economic considerations alone.
- (2) In any specific case, the Agency will allow ocean disposal of a waste only if the applicant can show that no practicable alternatives are available that have less impact on the total environment.
- (3) For the long run, the Agency will actively encourage environmentally beneficial approaches such as waste minimization, recycling, or reuse.

In order to comply with the City of New York decision, EPA must remove the conclusive presumption that materials which fail existing environmental impact criteria of the regulations (Subparts B, D, and E of 40 CFR Part 227) will unreasonably degrade the environment. In determining whether ocean disposal will unreasonably degrade or endanger human health, welfare or amenities, or the marine environment, ecological systems, or economic potentialities, EPA must consider all relevant statutory factors of section 102(a) of the Marine Protection, Research and Sanctuaries Act (MPRSA), including the need for the dumping and availability and environmental impacts of land-based alternatives.

A showing of need under the existing regulations involves an evaluation of alternatives and consideration of whether alternatives are practicable. Under existing 40 CFR 227.16(a), a need for dumping will be considered to have been demonstrated if:

- There are no practicable improvements which can be made to process technology or in overall waste treatment;
- There are no practicable alternative locations or methods of disposal or recycling (including storage) which have less adverse environmental impacts or potential risk to other parts of the environment than ocean dumping.

Practicable alternatives, as specified in 40 CFR 227.16(b), are those which:

"are available at reasonable incremental costs and energy expenditures, which need not be competitive with the costs of ocean dumping, taking into account the environmental benefits derived from such activity, including the relative environmental impacts associated with the use of alternatives to ocean dumping."

Current interpretation of the City of New York decision requires a showing of need for the dumping and absence of alternatives that is commensurate with the potential hazard of the material. The more hazardous or environmentally adverse the material, the greater the required showing of need for the dumping, and in comparing alternatives to ocean dumping, the Agency will consider the relative hazard of alternatives and availability of measures to reduce identified risks.

The City of New York decision compels EPA to interpret existing criteria in such a way that environmental effects of all alternatives to ocean dumping are assessed. This will be done on a case-by-case basis and involves an evaluation of whether the incremental costs and energy expenditures are reasonable, taking into account the environmental benefits and impacts of alternatives. Thus, an analysis of "total environment" includes all environmental impacts of all alternatives to ocean dumping.

Under the City of New York decision, EPA cannot deny a permit solely on the basis of failing the environmental impact criteria. The only materials that are excluded from dumping are those explicitly listed in section 102(a) of the Act and those listed in Annex I of the LDC unless they are present only as trace contaminants or rapidly rendered harmless. For all other materials, including those which may be banned in other disposal media, EPA must evaluate any permit application that proposes ocean dumping for these materials.

2. Question: Your regulations also state that the EPA will actively encourage environmentally beneficial approaches such as waste minimization, recycling or reuse. How do you plan to "encourage" these approaches?

Answer: Our support of waste minimization, recycling and reuse is stated in the Ocean Dumping Regulation and, for sewage sludge, in an Agency policy published on June 12, 1984.

Our encouragement of these techniques has taken several forms. Regional offices have examined these alternatives very closely as a part of ocean dumping permit issuance. Our most notable success in this area has been the Bethlehem Steel Company's reduction in the generation of ferrous chloride wastes, their conversion to ferric chloride, and its recycling in sewage treatment.

Section 405(e) of the Clean Water Act underscores that the selection of a sludge disposal method is a local government responsibility and EPA supports research and technology transfer of procedures used in all disposal practices. It does, however, place the majority of its efforts behind productive sludge uses. The Agency has a long-standing program for promoting the productive use of sewage sludge through research, technology transfer and through its publications.

3. Question: Right now only several communities in New York and New Jersey are dumping sludge into the ocean -- eventually they'll be dumping out at the 106 mile site. As the 1988 deadline approaches under the Clean Water Act more and more secondary treatment plants will be built and more sludge will be produced. Do you think we will see more applications for sludge dumping permits over the next few years? How many and which cities do you think will apply for permits?

Answer: At this time, we have received no applications for permits to ocean dump municipal sludge. However, we expect to receive inquiries and/or applications over the next few years as more secondary treatment plants come on-line. This is especially true if other use/disposal options are restricted. To our knowledge, Boston is the only city that is considering ocean dumping and in their case ocean dumping is one sludge disposal alternative among many that is being considered.

4. Question: How would you feel about changing the standard in the ocean dumping act from "unreasonably degrade" to something like "no significant degradation" of the oceans, or how about deleting the provision of the law which calls for balancing with land-based alternatives?

Answer: "Unreasonably degrade" as determined by the Agency includes an analysis of non-environmental factors such as the need for ocean dumping and the cost of ocean dumping alternatives. This analysis of social factors will be even more pronounced as a result of the City of New York v. EPA lawsuit which requires EPA to consider environmental factors when determining whether a material will unreasonably degrade the ocean and to consider the impact of alternatives to ocean dumping. "No significant degradation", on the other hand, seems to require only an analysis of environmental factors as they apply only to the ocean.

The Agency is committed to reducing the aggregate risk to human health and the environment from all forms of waste disposal. Disposal, when necessary should take place in a manner and medium resulting in the least adverse environmental impacts. Even though cross-media risk analysis is in the formative stage and will be ~~difficult~~ difficult to implement, the Agency needs the flexibility provided by terms such as "unreasonably degrade" in order to weigh disposal alternatives.

5. Question: EPA has less than a stellar record for making "final designation" on a number of interim-designated sites. Haven't you fallen far behind schedule in making these final designations? How many more sites do you have to make final designation on before your finished? Do you think environmental impact statements should be done before the sites receive final designations?

Answer: EPA has designated 19 sites in final form (9 for dredged material, and 10 for non-dredged material). 128 sites have interim designation (122 for dredged material, and 6 for non-dredged material). We have made considerable progress in EIS development and expect to have EIS's completed for the 47 sites identified in a consent agreement with the National Wildlife Federation (NWF) in FY 86.

Currently, we are in the process of developing a 2-year site survey plan for the Ocean Survey Vessel ANDERSON to gather environmental data on the remaining non-consent decree sites. We will be working with our regional offices as well as coordinating with the Corps of Engineers in developing this schedule for the 1986 and '87 surveys.

Under EPA's existing policy, we are required to prepare Environmental Impact Statements in connection with designation of sites for dumping under Section 102(c) of the Marine Protection, Research and Sanctuaries Act. The Agency is currently considering how to streamline the ocean dumping site designation process, while maintaining the quality of environmental review.

6. Question: The bill the Administration sent up last year contained a provision which called for a user fee system to recoup costs incurred in operating the ocean dumping program. This would cover the cost of program administration including site designation, permitting and monitoring. This year's Administration bill did not include that proposal -- Do you still support user fees for ocean dumping?

Answer: As indicated on p. 7 of the Agency's July 30, 1985 testimony, we support ocean dumping user fees. The attached letter of March 1, 1984 contains the Administration's position and a proposed amendment. The amendment would establish a user fee system to recoup costs incurred or expected to be incurred in operating the ocean dumping program, including program operations, site designation and monitoring. The fees would be calculated to allocate costs among all permittees according to tonnage dumped, type of waste, special monitoring requirements or other appropriate factors. The fees would be waived when the permit applicant is another Federal Agency.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 1984

THE ADMINISTRATOR

Honorable George Bush
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

Enclosed is our proposed bill "To amend and extend Title I of the Marine Protection, Research, and Sanctuaries Act, as amended, for two years."

The bill would extend our appropriation authorizations under Section 111 of the Marine Protection, Research, and Sanctuaries Act through fiscal year 1986. These authorities expired on September 30, 1982. This bill would also amend the Act to establish a user fee system to recoup funds which the Agency and the Department of Army Corps of Engineers expend for program activities in direct support of ocean dumping permittees.

Enactment of Section 1 of this bill would enable the Environmental Protection Agency (EPA) to continue the programs envisioned by Title I of the Act. These programs include identification and designation of suitable ocean dumping sites, issuance of permits for ocean dumping, and establishment and implementation of plans to phase out the dumping of waste which will unreasonably degrade the marine environment. The authorization would also provide for basic operating expenses and salaries.

Title I of the Marine Protection Research, and Sanctuaries Act establishes a permit system for the ocean dumping of wastes to be administered by EPA and the Department of Army Corps of Engineers. Under the Act EPA is authorized to designate areas where ocean dumping may be permitted or prohibited. Further, EPA is responsible for developing criteria for issuing permits. The dumping of dredged material is regulated under permits issued by the Corps, in accordance with the EPA criteria. Permits for dumping all other wastes are issued by EPA. The Administrator is required to review and evaluate the permit applications, as well as conduct the operating ocean program.

Section 2 of the enclosed bill would amend the Marine Protection, Research, and Sanctuaries Act to establish a user fee system to recoup costs incurred in operating the ocean dumping program. Program administration, which includes such activities as site designation, permitting and monitoring, is done at considerable expense to the Federal government. Since these activities are directly beneficial to disposers, a user fee system

would be particularly appropriate. This bill would amend Section 104 of the Act to authorize the Administrator of the Environmental Protection Agency (or the Secretary of the Army, as the case may be) to prescribe and collect fees to recover those costs directly related to the administration of services rendered to ocean dumping permittees. These functions include site designation and those monitoring activities conducted in direct support of the operating program (exclusive of research). The fees would be waived when the permit applicant is another Federal Agency.

User fees under §104(b)(2) would be used to recoup costs of site designation activities, and to offset costs of two types of monitoring: compliance monitoring to ensure that the terms and conditions of a permit are being met; and site specific monitoring to identify the impacts of ocean dumping and to ensure that such dumping does not unreasonably degrade the marine environment in or around the dumpsite. With the exception of Federal entities, user fees under §104(b)(2) would be calculated to allocate costs among all Section 102 and Section 103 permittees according to tonnage dumped, types of waste, special monitoring requirements, or other appropriate factors.

In addition, proposed subsection (b)(2)(B) would provide the permitting authority discretion to prescribe any reporting requirement deemed appropriate.

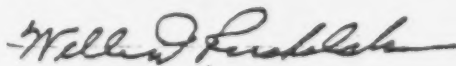
We recommend that this proposal be referred to the appropriate Committee for consideration and that it be enacted.

Our request for appropriation authorizations for fiscal year 1986 activities under Title I of the Marine Protection, Research, and Sanctuaries Act is \$4,167,300. This is the amount requested in the President's 1986 Budget for these activities.

I want to reaffirm our continuing willingness to assist the Congress as you proceed to consider amendments to the ocean dumping authority of the Environmental Protection Agency.

The Office of Management and Budget advises that enactment of this legislative proposal would be in accord with the program of the President.

Sincerely,



William D. Ruckelshaus

Enclosure

A 111

To amend and extend Title 1 of the Marine Protection, Research, and Sanctuaries Act, as amended, for two years.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled, That

Section 1. Section 111 of the Marine Protection Research, and Sanctuaries Act, as amended (33 U.S.C. 1420), is amended by striking "and" immediately following "1981," and inserting "and not to exceed \$4,187,300 for fiscal year 198⁵,⁶ and such sums as may be necessary for fiscal year 198⁷," immediately following "1982,".

Sec. 2. Section 104(b) of the Marine Protection, Research and Sanctuaries Act, as amended (33 U.S.C. 1414), is amended by inserting "(1)" immediately following "(b)" and adding at the end thereof the following:

"(2)(A) As a condition of issuing and maintaining a permit under Sections 102 and 103, the Administrator or the Secretary, as the case may be, may prescribe and collect an additional fee to recover the costs incurred or expected to be incurred for site designation, program operations, and site and compliance monitoring. The fee may be based upon tonnage transported to be dumped or any other factors that the Administrator or Secretary deem appropriate. This fee shall not be applicable to other Federal agencies. The fee charged to non-Federal entities for the disposal of dredged material shall represent the share of the costs of the total dredged material program which the Secretary determines to be attributable to such non-Federal entities.

(B) The Administrator or Secretary, as the case may be, may prescribe such reporting requirements as he or she deems appropriate with regard to actions taken by permittees pursuant to permits issued under this title."

7. Question: I believe EPA testified in the House that it feels that the London Dumping Convention restrictions should only be applied to permits issued under section 102 of the Act. Why not have the restriction apply to research and emergency permits as well as permits for dredged spoils?

Answer: The characterization of EPA's position on the applicability of the London Dumping Convention (LDC) as stated in the question is inaccurate and needs to be clarified.

EPA testified before the House Committee on Public Works and Transportation on July 10, 1985 that the Agency supports the current LDC, is implementing its provisions, and is active in the international arena to refine it. We further testified that we oppose direct applicability of the LDC to the entirety of Title I because it would have the effect of allowing court challenge of each permit issued, in contrast to the current situation which requires compliance with the LDC only in issuing generally applicable criteria under section 102(a) of the MPRSA. The criteria apply to all classes of permits including emergency and dredged material permits.

The key to understanding our concern with the provision is analyzing when it is appropriate to challenge EPA's interpretation of LDC provisions. Currently, the MPRSA requires EPA to comply with the LDC only in promulgating or revising the general criteria for reviewing and evaluating permit applications. National Wildlife Federation v. Costle (629 F. 2d 188, 126 (D.C. Cir. 1980)) held that the MPRSA does not apply the LDC directly to permit proceedings or site designations. Thus compliance with the LDC can only be raised in a petition for review of the criteria. It is the Agency's position that it is much more efficient to raise and resolve this LDC compliance issue initially in litigation on the rules governing permits and designation rather than in separate challenges to individual permitting and site designation actions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

July 29, 1985

Honorable Frank R. Lautenberg
United States Senate
Washington, D.C. 20460

Dear Senator Lautenberg:

I am responding to your letter of June 28, 1985 which expressed your concerns about schedules that the U.S. Environmental Protection Agency (EPA) negotiated with the nine municipal sludge dumpers for phasing-out municipal sludge disposal at the 12-Mile Sewage Sludge Dump Site. I have attached a response to the specific questions raised in your letter.

While I understand and share your concerns about the need to eliminate the sludge dumping operations at the 12 mile site, I am certain that the schedules negotiated by EPA Region II, providing for complete phase out by December, 1987, are sound and provide for expeditious and orderly transition of dumping operations to the 106-mile site.

If I or my staff can be of any further assistance, please contact me.

Sincerely yours,

Lee M. Thomas

Attachment

cc

RESPONSE TO SENATOR LAUTENBERG'S JUNE 28, 1985 LETTER

1. What was the basis for your original estimate that sludge dumping at the 12-mile site would terminate within 18 months of EPA's decision to close down this dumpsite?
2. What made you change this termination date?

EPA's original estimate was that municipal sludge dumping at the 12-mile site could be terminated within 18 months of EPA's determination to not redesignate the site. This estimate was based upon our most optimistic estimate of the shortest possible timeframe within which that move to another dump site could be accomplished. Using the most optimistic estimate was important also in establishing a posture for our pending negotiations.

This original estimate was based upon several assumptions, not the least of which being that the dumpers had used the time since our May, 1984 tentative determination to deny their petitions to analyze individualized options to effectuate the transfer to the 106-mile site. However, the existing court orders did not give us the authority to require the sludge dumpers to take steps to phase-out sludge dumping at the 12-mile site until after we issued our April 1, 1985 final determination not to redesignate the site.

Concurrently with our April 1, 1985 determination, we sent letters to all of the sludge dumpers requesting that they submit schedules for the shifting of their dumping operations to the 106-mile site. In addition, we set up meetings with each of the dumpers, the existing haulers and potential haulers. After this initial round of meetings and after reviewing the submissions from the sludge dumpers, it was evident that:

- 1) None of the sludge dumpers had taken any steps to implement the phase-out, although the New York City Department of Environmental Protection (NYCDEP) had requested and analyzed technical proposals.
- 2) Certain assumptions that had been made with respect to available storage capacity, contracts, etc. were not as firm as we had previously believed. (This issue is further addressed in our response to your question on existing barge and storage capacity.)
- 3) Only Nassau and Westchester Counties had proposed to use the methodology that we had assumed would be used, i.e., individually contracting with sludge haulers. The New Jersey authorities decided to combine efforts ("joint venture") rather than contract separately with the waste haulers. NYCDEP decided that it would construct its own barges rather than contract with waste haulers for the dumping of its sludge.

- 4) The hauling companies had several legitimate concerns about operating vessels at the 106-mile site; i.e., their contractual liabilities if inclement weather caused barge and storage capacity to be less than the sludge producers' needs. Even the most optimistic of the contractor letters we have recently received for handling the large volumes of sludge from all of the major dumpers have cited time periods of 10-18 months from the award of a contract to moving all dumping activities to the 106-mile site. These letters did not address the time necessary to develop bid specifications, advertise, receive and evaluate bids which is projected currently at approximately one year or more.
- 5) Timing with respect to the budgetary processes of the various entities was off by at least 6 months, i.e., the New Jersey authorities budget year begins December 31, while NYCDEP's starts July 1.

The original estimate did not provide for a progressive phase-out of operations prior to the end of the 18 month time frame. Under the current schedules, sludge operations at the 12-mile site would be discontinued for Westchester and Nassau Counties in March and April, 1986 respectively. By April 1986 NYCDEP and May 1986 the New Jersey Authorities would shift 10% and 25%, respectively, of their dumping operations to the 106-mile site working toward a complete phase-out by December 31, 1987.

3. Have you changed your estimate of the costs involved in moving to the 106-mile dumpsite?

EPA has not revised its estimate of the costs involved in moving to the 106-mile site. The costs involved are based on our analysis of the sludge dumper's generation rate and the estimated unit cost of disposing at the 106-mile site. Factors which will influence costs are: the selected option for transfer of operations to the 106-mile site, changes in POTW service, and level or type of treatment or industrial pretreatment provided.

The estimated costs of shifting municipal sludge dumping operations from the 12-mile site to the 106-mile site were based on an EPA Report, "Economic Analysis of Shifting Ocean Disposal of Sewage Sludge from the 12-Mile Site to the 106-Mile Site," (May 1984).

Total annual transportation costs are estimated to be \$40 million. The incremental cost for the 106-mile site is the difference between the two sites' cost and is estimated to be \$25 million for all sludge dumpers. The incremental annual costs are estimated to range from \$344 thousand for New Jersey's Linden/Roselle Rahway Valley authorities up to \$11.3 million for NYCDEP.

The actual costs of the 106-mile site operations will be known when the various sludge dumpers award actual contracts.

4. What is the capacity of existing vessel and barges which are capable of going to the 106-mile dumpsite?

The current fleet capability to haul sludge to the 106-mile site is limited by the number of vessels certified to operate at the 106-mile site, sludge production rates, travel time to and from the 106-mile site, storage needs, weather, etc. For example, round trip travel time to the 12-mile site is approximately 14 hours versus the 72 hours for the 106-mile site. In addition, until capacity is developed for full operation at the 106-mile site, some of the existing capacity must be dedicated to the sludge that must be hauled to the 12-mile site.

Prior to initiating negotiations with the sludge dumpers, EPA analyzed the capabilities of the current fleet of vessels for hauling municipal sludge to the 106-mile site. We found that most of the private sludge hauling vessels now in use are certified by the U.S. Coast Guard to journey to the 106-mile site. The vessels owned and operated by NYCDEP currently certified by the U.S. Coast Guard are not certified to operate at the 106-mile site. In addition, the fleet is inadequate to haul all of the City's sludge to this site.

Our current estimate is that the private barge fleet could not haul more than 50% of the total volume of sludge to the 106-mile site. In addition, hauling 50% of the sludge would require full utilization of the fleet and consequently no reserve capacity would be available to protect against equipment breakdowns, periods of inclement weather, etc. We believe that reserve capacities of 25-50% are necessary to ensure that all sludge can be taken to the 106-mile site and avoid emergency situations.

5. Is additional vessel or barge capacity needed to complete the transition to the 106-mile site? If so, how long will it take to construct these vessels or barges?

Additional vessels are required to complete the transition to the 106-mile site. The Nassau County Department of Public Works, the Westchester County Department of Environmental Facilities, and the New Jersey authorities will accomplish the transition via contracts with private haulers, thereby requiring private enterprise to develop this additional capacity - both for storage and hauling. NYCDEP will build three large barges providing for its own storage and hauling capacity. It will then contract with a tug boat company to haul its sludge to the 106-mile site. NYCDEP will need approximately 12-15 months from award of contract to have at least three vessels on line to complete its transfer to the 106-mile site. Westchester and Nassau Counties expect to have their contracts effective in March and April, 1986 respectively. NYCDEP and the New Jersey authorities expect to be dumping 100% of their sludge by December 31, 1987.

Both NYCDEP and the New Jersey authorities have agreed to commence phasing-out sludge dumping operations from the 12-mile site beginning in April and May 1986, respectively. (See attached graphs 1 and 2.) It is important to note that the following percentages of the sludge currently dumped at the 12-mile site will be dumped at the 106-mile site by the following dates: May 1986 - 30%; June 1987 - 43%; September 1987 - 59%, and December 31, 1987 - 100%.

6. Is your transition schedule based on use of a mothership?

The agreed upon transition schedules are not specifically based on the use of a mothership. As we have discussed, NYCDEP has decided to construct its own vessels to haul its sludge. They have made this decision after evaluating several proposals which included the mothership concept. Nassau and Westchester Counties and the New Jersey authorities will contract with private haulers. It is possible that a combination of barging and the mothership operation may turn out to be the method proposed by the successful bidder. However, we could not and did not require any of the dumpers to utilize any specific methodology to effectuate the move to the 106-mile site.

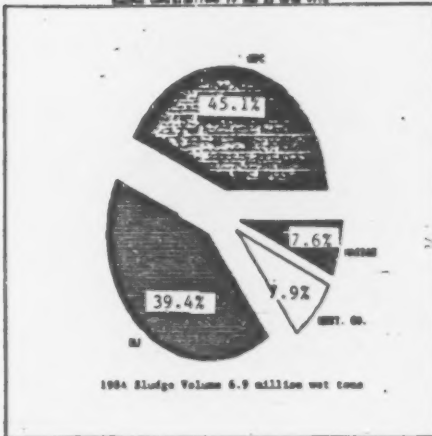
7. Will any ocean dumpers need to construct storage facilities? If so, how long will it take to construct such facilities?

While each of the sludge dumpers have limited on-site sludge storage capacity, none have decided to build additional land-based sludge storage. Each prefers to require the haulers to provide barge storage capacity for the 106-mile site operation. The barges that NYCDEP will provide for its storage and hauling needs will be constructed by November 30, 1987.

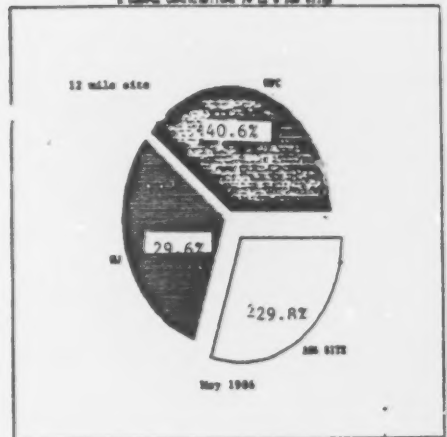
8. Will any ocean dumpers need to dredge out ship channels for their barges or vessels? If so, how long will it take to complete this dredging?

While some dredging may be required for maintenance and increased vessel capacity at docking facilities, such dredging operations can be accomplished during the transition period and should not affect the agreed upon schedules.

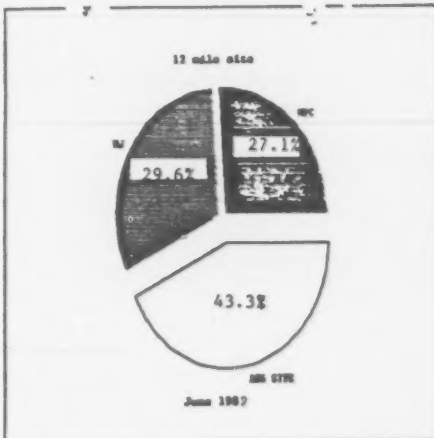
SLUDGE CONTRIBUTION TO THE 12 MILE SITE



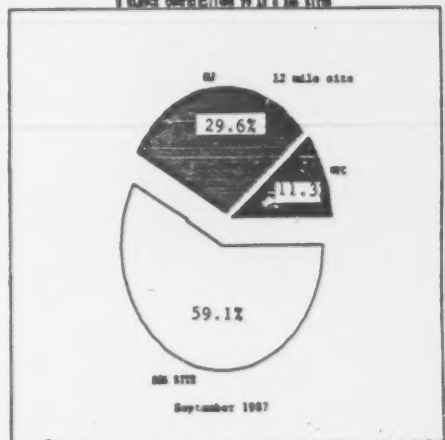
SLUDGE CONTRIBUTION TO THE 12 MILE SITE



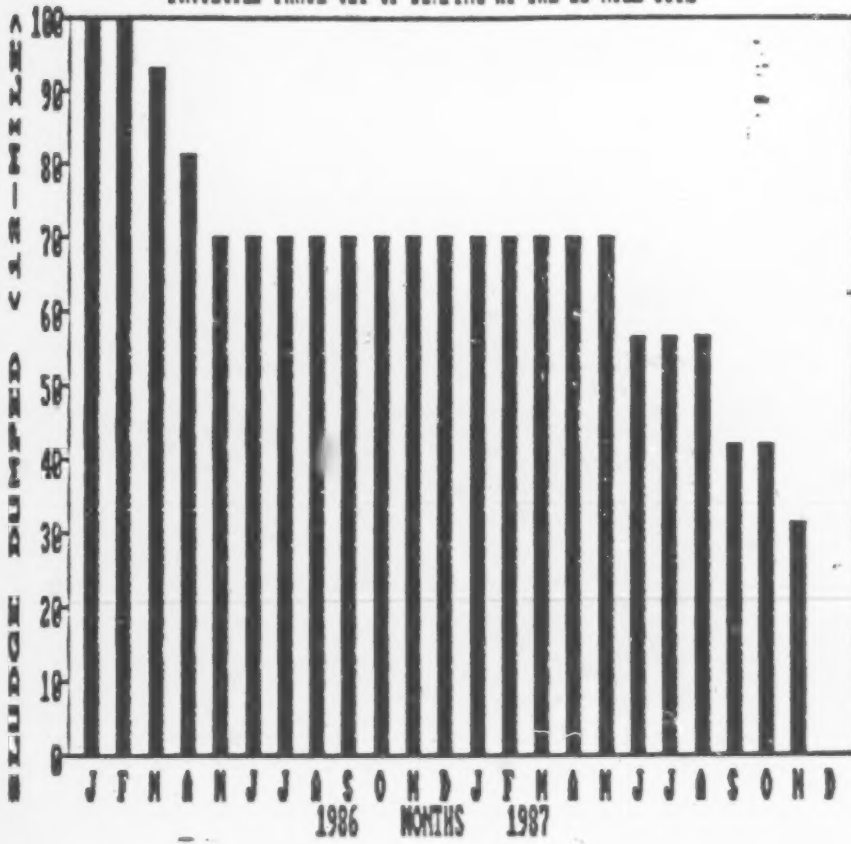
12 mile site



SLUDGE CONTRIBUTION TO THE 12 MILE SITE



PROJECTED PHASE-OUT OF DUMPING AT THE 12-MILE SITE



FRANK R. LAUTENBERG
NEW JERSEY

SENATE OFFICE BUILDING
WASHINGTON, D.C. 20510
(202) 224-2754

United States Senate
WASHINGTON, D.C. 20510

June 28, 1985

The Honorable
Lee Thomas
Environmental Protection Agency
Washington, D.C. 20460

Dear Lee:

I am distressed at the prospect that the Environmental Protection Agency will soon announce that sewage sludge dumping will continue at the 12 mile dumpsite through December, 1987.

EPA officials consistently have said that a complete transition to shift sewage sludge dumping from the 12 to the 106 mile site could be accomplished within 18 months of the decision to close down the 12 mile site. That decision was announced on April 1, 1985 making October 1, 1986 as the date for ending sewage sludge dumping at the 12 mile site. The termination date EPA agreed to is more than one year later than EPA previously said was necessary.

The Senate Environment and Public Works Committee has announced a hearing on July 29 to hear testimony on S. 824, the Ocean Revitalization Act, which I introduced earlier this year. My bill calls for a closure of the 12 mile site within 18 months of enactment. At this hearing I intend to examine EPA witnesses over this sudden shift in the deadline for terminating ocean dumping of the 12 mile site.

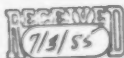
To assist me in preparing for this hearing, I request that you provide me with answers to the following questions by July 15:

What was the basis for your original estimate that sludge dumping at the 12 mile site would terminate within 18 months of EPA's decision to close down this dumpsite?

What made you change this termination date?

Have you changed your estimate of the costs involved in moving to the 106 mile dumpsite?

What is the capacity of existing vessels and barges which are capable of going to the 106 mile dumpsite?



Is additional vessel or barge capacity needed to complete the transition to the 106 mile site? If so, how long will it take to construct these vessels or barges?

Is your transition schedule based on use of a mothership?

Will any ocean dumpers need to construct storage facilities? If so, how long will it take to construct such facilities?

Will any ocean dumpers need to dredge out ship channels for their barges or vessels? If so, how long will it take to complete this dredging?

EPA's decision to close down the 12 mile sewage sludge dumpsite occurred only after years of regulatory delay. The transition from the 12 to the 106 mile site should be implemented as quickly as possible. I urge you to review EPA's proposed schedule and determine whether EPA can accelerate the closure of the 12 mile dumpsite.

Sincerely,

A handwritten signature in dark ink, appearing to read "Frank", is written over the word "Sincerely,".



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 3 1985

OFFICE OF
EXTERNAL AFFAIRS

Honorable Frank R. Lautenberg
Subcommittee on Environmental
Pollution
Committee on Environment and Public
Works
United States Senate
Washington, D. C. 20510

Dear Senator Lautenberg:

Enclosed, for insertion in the hearing record,
are the responses to your questions on the subject of
ocean dumping which were addressed to Mr. Ed Johnson
following his testimony of July 30, 1985.

If we can be of any further assistance, please feel
free to contact us.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Richard E. Sanderson".

for Richard E. Sanderson
Acting Assistant Administrator
for External Affairs

Enclosure

QUESTION A:

In early July you testified before the House Public Works Committee that the 18 month deadline EPA originally said was adequate to end dumping at the 12-Mile dumpsite was not based on a rigorous analysis? Can you explain what you mean by this.

ANSWER:

When EPA suggested that an 18 month period would be sufficient to allow the movement of sludge dumping activity from the 12-Mile site to the 106-Mile site, it made assumption which have proven to be in error. First, it assumed that all dumpers had been making contingency plans to end their dumping since the Agency had published its intent to not renew the site's designation. This proved to be wrong. Unfortunately no dumper took actions which could speed the site movement process. As you know, the City of New York requested proposals from private haulers during this period, but these did not result in proposals that the City felt it could accept.

We also assumed that dumpers knew what new transportation arrangements would be in their best interests. We were unable to foresee that New York and the New Jersey communities would be unable to quickly define their preferred alternatives. Only the two smallest dumpers (Westchester and Nassau Counties) are able to quickly enter into contract negotiations without a great deal of further study and specification writing, etc.

We also underestimated the time required for local governments to prepare to contract for barge construction. If the dumpers had decided on their preferred alternatives, had contingency plans, and needed only a short time to prepare contracts, then all of the sludge could be moved to the 106-mile site within 18 months.

QUESTION B(1):

As I understand it, there are essentially two components involved in the schedules, the administrative action involved in issuing contracts and the construction of additional barge capacity where that is needed. Is this correct?

ANSWER:

The two components, administrative actions for issuance of contracts and construction of barges, are basically the only components involved for all applicants to pursue dumping at the 106-Mile Site. However, the New Jersey joint venture involves a third component -- legislation to allow for joint bidding procedures.

QUESTIONS B(2):

How long will it take each of the ocean dumpers to complete the administrative action involved in issuing contracts?

ANSWER:

The date for each of the applicants to complete their administrative actions up until award of contract are as follows:

New Jersey Joint Venture - May 1986
Westchester County - January 1986
Nassau County - April 1986
New York City - May 1986

QUESTION B(3):

The first movement of sludge out to the 106 site will occur in the spring of 1986. Will this initial movement of sludge use existing barge capacity?

ANSWER:

EPA anticipates that the initial movement of sludge (Westchester and Nassau County in March and April, 1986 respectively) to the 106-Mile Site will be done using the existing barge fleet.

QUESTION B(4):

Is this the maximum amount of sludge which can reasonably be moved to the 106 site with existing barge capacity?

ANSWER:

EPA has performed fleet capacity computations based upon the existing sludge volumes produced and the total capacity of the fleet currently certified for operations at the 106-Mile Site. Based upon these projections approximately 50% of the total sludge volume can be transported to the 106-Mile Site with no reserve margin (i.e., no allowance for equipment breakdowns, inclement weather, and other mishaps which would require an increase in sludge storage capability). We believe a safe reserve margin of 20 to 50% reserve fleet capacity is necessary to haul sludge to the 106-Mile Site. Our negotiated schedules include 30% total sludge disposal at the 106-Mile Site by May 1986 we believe this is a realistic amount for the existing fleet to handle.

QUESTION B(5):

How many barges and vessels will need to be built or refurbished to have a complete transition to the 106 Mile Site?

ANSWER:

A minimum of three 15,000 wet ton barges will need to be constructed to handle New York City Sludge disposal at the 106-Mile Site. To handle transition of all dumping operations for the New Jersey sewage authorities and Nassau and Westchester Counties, additional barges or vessels such as a "Mothership" will have to be constructed as well. The total fleet capacity for all dumping will have to be expanded approximately three fold to ensure safe and reliable dumping at the 106-Mile Site. The exact number and combination of barges and/or ships cannot be predicted at present.

QUESTIONS B(6):

How long will it take to construct or refurbish these barges or vessels?

ANSWER:

Current construction schedules for the 15,000 wet ton barges by New York City present a period of July 1986 to June 1987 for construction of the first barge. Construction of the second and third barges in the New York fleet will occur between October 1986 and December 1987. The New Jersey schedule calls for a period of May 1986 to December 1987 for construction activities.

QUESTIONS B(7):

I understand that U.S. shipyards are in the midst of a severe depression. Can't we use a number of these shipyards to construct or refurbish vessels in a cost-effective manner and more rapidly than your schedule provides?

ANSWER:

A few shipyards may be used to construct or refurbish barges and/or ships. A requirement to construct each vessel at a separate shipyard may save a few months in construction time but would likely be expensive and may possibly result in longer administrative delays.

QUESTION R(8):

Would the use of Mothership vessels instead of barges speed up the phase out period?

ANSWER:

We don't believe that using a Mothership vessel would significantly change the time frame of the phase out. In fact, during our negotiations we found that several factors, including the siting of a shore-side facility, new construction of piers, dredging, and the obtaining of Federal and state permits could make implementation of the Mothership concept an extremely lengthy process. However, the New Jersey joint venture does not rule out the possibility of using a Mothership.

QUESTION R(9):

New York City does not use new barges to move to the 106 Mile Site until June 1987. Is this delay solely caused by construction or refurbishing of the vessels?

ANSWER:

Yes. The schedules are the result of construction activities which include administrative actions, contract execution and the actual construction of vessels.

QUESTION R(10):

Do you believe that the December 1987 deadline can reasonably be achieved by the sewerage agencies?

ANSWER:

Yes. Each of the applicants has submitted signed formal statements attesting to their formal acceptance of these deadlines. The time steps in each of the schedules were analyzed to ensure that all reasonable eventualities have been considered.

QUESTION B(11):

What action does EPA intend to take to ensure schedule compliance?

ANSWER:

EPA has received formal commitments from New York City, Nassau and Westchester Counties, and the six New Jersey sewage authorities that each of the negotiated schedules is satisfactory and will be met. EPA is presently working with the U.S. Department of Justice to incorporate each of the respective schedules into each of the consent decrees which exist between EPA and sludge dumpers. By incorporating the schedules into the consent decrees any schedule violation will be a permit violation and subject to enforcement action. As discussed in the answer to question B(12) EPA will carefully monitor the progress of the schedules.

QUESTION B(12):

Please provide the detailed schedule of actions EPA will be using to evaluate that the phase out process is proceeding properly.

ANSWER:

EPA will monitor the Phase-out process and will continue to do the following:

1. EPA will maintain biweekly telephone communication with all of the dumpers.
2. EPA personnel have already visited the site of the North River Vessel refit and will continue to perform field inspections as appropriate during large vessel construction.
3. EPA has requested draft copies of bid specifications documents etc., to insure that all pertinent features of the phase-out process will be incorporated into the proposed contracts.
4. EPA has contacted and will continue to contact all applicants at the scheduled completion of important milestones in each negotiated schedule, to ascertain applicant compliance. EPA will coordinate meetings with applicants to discuss their progress.
5. EPA will establish a sludge task force to coordinate future actions (see question B(1) below).

QUESTION C(1):

A few months ago at the Committee's hearings on the Clean Water Act, I asked Jack Ravan if he agreed with me that ocean dumping of sewage sludge should be viewed only as a temporary disposal alternative. Mr. Ravan indicated that he agreed with me. Do you also share this view?

ANSWER:

Before an ocean dumping permit is issued, the MPRSA and its implementing regulations require an applicant to demonstrate that there is a "need" to ocean dump. The demonstration of need includes an analysis of land-based alternatives. The policy of the Agency, and one I share, is that ocean dumping will be allowed only if an applicant can show that no practicable alternatives are available that have less impact on the total environment. The Agency is also committed to the goal of encouraging the use of environmentally appropriate and cost-effective technologies to recycle or reuse waste. Since ocean dumping is a disposal option rather than a recycle or reuse method, it is my hope that recycling or reuse of sewage sludge will eventually supercede ocean dumping to the extent that recycling/reuse is a less hazardous option.

QUESTION C(2):

Do you expect that ocean dumping of sewage sludge will continue after the five year designation period ends?

ANSWER:

As explained more fully in the answer to question C.1., if no practicable land-based alternatives are available that have less impact on the total environment, ocean dumping is likely to continue after the five year designation. The Agency will evaluate this issue as the end of the designation period draws near.

QUESTION C(3):

What is EPA doing to develop land-based alternatives to ocean dumping of sewage sludge?

ANSWER: ,

EPA is encouraging the use of environmentally appropriate and cost-effective land-based waste minimization, recycling and reuse technologies rather than ocean dumping. Regional offices closely examine alternatives when evaluating ocean dumping permit applications and have successfully recommended alternatives to ocean dumping permit applicants. EPA also supports research on, and technology transfer of, procedures used in all sludge disposal options. The Agency has a long-standing program for promoting the productive use of sewage sludge where there are minimal risks to the environment and public health. Therefore, we place the majority of our research and technology transfer efforts behind productive sludge uses. For example, in September, 1984 we completed a guidance document for use in evaluating sludge use/disposal alternatives. We concluded a workshop on the land application of sludge in 1983, and early this year completed a series of conferences on compositing technologies. We have also recently conducted four seminars throughout the nation in an effort to present EPA's program for developing sludge regulations.

QUESTION D(1):

Are you sitting down with the existing ocean dumpers to discuss with them the problems of disposing of their sludge and developing safe and cost-effective alternatives to ocean dumping for the sludge they produce?

ANSWER:

Each of the sludge dumpers is required to obtain a permit from EPA for ocean dumping operations. The permit review process includes a comprehensive examination of alternatives. The sludge dumpers are currently conducting their operations pursuant to consent decrees. Shortly, each dumper will have to submit new permit applications to EPA for disposal at the 106-Mile Site.

EPA has agreed to establish a sludge task force in agreements between EPA and the states of New York and New Jersey. As part of this, EPA will meet regularly with the dumpers and other key regulatory agencies to discuss the problems associated with sludge disposal in the New York Metropolitan Region. Our agenda will include discussions of monitoring requirements, review of discharge rates, data synthesis, and alternate sludge disposal techniques.

QUESTION D(2):

The New Jersey sewerage authorities testified that they don't have the resources to develop alternatives to ocean dumping. Would you agree that the sewerage authorities need your help if they are to end ocean dumping of sludge?

ANSWER:

In the past, EPA has aided the sewerage authorities in exploring alternate sludge disposal strategies through the construction grants and ocean dumping programs. Through EPA's future sludge task force, alternatives to ocean dumping will continue to be explored.

QUESTION D-3:

Do other communities have the levels of toxic contaminants found in the cities that ocean dump?

ANSWER:

Sludge quality varies greatly between the seventeen treatment plants that currently ocean dump. The range of contaminant concentrations found is well within the ranges EPA has observed in other large industrial communities. However, geographical, political, and economic considerations have led those communities to use other methods of disposal.

QUESTION D-4:

How are these communities disposing of their sludge?

ANSWER:

Our survey of sludge disposal and use practices shows the following practices in large (greater than 10 mgd) treatment plants nation wide:

	<u>Percent of Sludge</u>
Distribution & Marketing	19
Food Chain Land Application	10
Non-Food Chain Land Application	11
Landfill	12
Incineration	32
Ocean Dumping	4
Other (usually storage lagoons)	12

This is data from 1982.

We believe that these data show that a wide range of disposal and use practices are possible with plants of this character and size.

QUESTION D-5:

Earlier this year I asked Lee Thomas whether EPA was funding sludge disposal demonstration projects. He said that none has been funded since 1982. Why has EPA stopped funding these projects?

ANSWER:

Other mechanisms for transferring knowledge of existing technology are now used in lieu of demonstration projects. The enclosed pamphlet "Use and Disposal of Municipal Sewage Sludge" is an example of publications that our Technology Transfer Program produces. The list of references starting on page 73 is an extensive list of current publications.

In addition to these publications, we sponsor research to refine these techniques, and host symposium and workshops where these technologies can be described and discussed.

QUESTION D-6:

Does EPA have a program to educate the public on the safe use of sludge?

ANSWER:

The requirements of EPA's current regulations governing sludge management, and summaries of good management practices are widely available. The document enclosed was prepared for the informed public official. Smaller pamphlets such as five enclosed have been prepared to advise the public of waste treatment issues. In addition, EPA is currently developing comprehensive sludge regulations under section 405 of CWA. These regulations will be in the form of criteria or management practices for each of the major sludge disposal options. They are to be proposed in the fall of 1986 and will allow for the ultimate long-term safe disposal of sludge no matter what option a community may choose.

EPA encourages States and local governments to establish outreach programs to educate local communities on matters that we of immediate concern.

QUESTION 7:

Please describe EPA research and funding levels for the following areas:

ANSWER:

Potential Uses of Sewage Sludge Incinerator Ash

Thus far, EPA's Office of Research and Development (ORD) has not identified any uses for sludge incinerator ash. ORD has done metal extraction studies in the past. No economics studies were involved. In the United States, incinerator ash is tested in compliance with RCRA EP toxicity procedures. If failing the test, the ash must be treated as a hazardous waste and must be sent to a permitted RCRA subtitle C facility. Otherwise, the ash is normally disposed of in landfills or lagoons (similar to a solid waste) which must be in compliance with RCRA Subtitle D regulations.

Japan has made attempts to use sludge incinerator ash as a construction material aggregate. Japan also unsuccessfully tried to market sludge ash as a fertilizer, but found too many harmful materials in the product. We are aware of incinerator ash being reclaimed for its phosphorus content and another instance where ash was reclaimed for its gold content.

Lime Stabilization of Dewatered Sludge

ORD has done considerable work in the area of lime stabilization. A five year effort was carried out in the early 1970's, which successfully demonstrate lime stabilization at the laboratory, pilot and field-scale levels. Lime stabilization is practiced extensively in the New England area. This technology assisted this area in dealing with high costs of fuel during the 1970's fuel crisis, substituting for incineration, and thus eliminating fuel costs. About \$1,000,000 was spent on this research effort. No further research was warranted.

Fate of Organic Compounds in Sludge and in Soil and Vegetables During Land Application

Previous research with North Carolina State University established a direct uptake of organic compounds by plants. A major effort has just been initiated with New Mexico State University to determine the effects of land application of sewage sludge on plant assimilation of trace organic compounds

as a function of rate of application. Their evaluations will also determine the effect of time on plant bioavailability. This is a 3-year effort supported with \$430,000 by EPA. In the interim period, EPA's section 405 CWA sludge regulations will address the uptake of organic compounds by plants and domestic farm animals, utilizing existing data on the subject.

Standardization of Sludge Testing

In FY'85 ORD has been conducting research on one project relative to the standardization of sludge testing. This project is designed to develop a cost-effective laboratory procedure for determining potential bioaccumulation of contaminants associated with sewage sludge destined for ocean disposal. The funding level for this project is \$70K.

Health Effects of Composting Facilities

The Office of Research and Development, Office of Health Research is conducting research to determine the potential health effects resulting from the distribution and marketing of sludge compost products. In FY '85 and FY '86, a study will be underway to determine possible levels of human exposure to pathogens and organic chemicals in sludge composting products. Samples of compost produced from various treatment techniques and from various locations throughout the U.S. are being collected and analyzed to determine the levels of pathogenic bacteria, viruses, protozoans, and helminths and the occurrence and level of selected organic chemicals. In addition, this study is attempting to identify a human population which is exposed to sludge compost through various routes of exposure to assess the feasibility of conducting a follow-up epidemiology study to determine possible health effects. The extramural resources for this project are: FY '85 \$175.0K and FY '86 \$180K.

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STATEMENT

OF

ROBERT K. DAWSON

ACTING

ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

DEPARTMENT OF THE ARMY

ON

TITLE I OF THE MARINE PROTECTION,
RESEARCH, AND SANCTUARIES ACT OF 1972 AND S. 824

BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

JULY 30, 1985

NOT FOR RELEASE
UNTIL RELEASED BY THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Mr. Chairman and members of the Subcommittee:

I am Robert K. Dawson, Acting Assistant Secretary of the Army for Civil Works.

I appreciate this opportunity to appear before you to discuss S.824 a bill "To amend Title I of the Marine Protection, Research, and Sanctuaries Act of 1972," hereinafter referred to as the Ocean Dumping Act.

As you requested, my testimony today will address the Secretary of Army's role and responsibilities under Title I of the Ocean Dumping Act as well as the Army's views on the provisions of S.824.

Mr. Chairman, our interest in these proceedings is primarily in two areas. The first is our mission to construct and maintain navigation improvements within the United States. The importance of dredging to maintain navigation for national defense and the economy is clearly recognized in both the Ocean Dumping Act and the Clean Water Act. In our opinion, any amendments to these statutes should continue to safeguard our ability to maintain navigation channels through dredging and disposal of dredged material in efficient, environmentally responsible and economical ways.

Our second area of interest is in the regulation by the Secretary of the Army of dredged material disposal activities within the United

States and in the ocean. This responsibility is contained in and is administered under Section 103 of the Ocean Dumping Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 404 of the Clean Water Act. In addition, other statutes such as NEPA, the Endangered Species Act, and the Coastal Zone Management Act, in many circumstances, influence the manner in which dredging and disposal activities are undertaken.

On an average, 65 million cubic yards of dredged material (about 20 percent of the total national dredged material yardage) regulated by the Corps are disposed in ocean waters each year. Over 95 percent of this average annual ocean disposal yardage is derived from Congressionally-authorized Federal navigation projects maintained by the Corps of Engineers. The Corps issues an average of 35 ocean dredged material permits each year under our Section 103 regulatory authority. Typically, well over fifty percent of this yardage regulated by the Corps is disposed by other Federal agencies; primarily the Department of the Navy.

At present, 131 ocean disposal sites are designated nationwide to meet the dredged material disposal requirements of some 115 coastal navigation projects as well as permit requirements. Fifteen of these sites have been designated using the optional Section 103 authority when use of an EPA designated site is not feasible.

The Army believes that the statute now provides, and should continue to provide for well-reasoned consideration of all practicable

alternatives for the disposal of dredged material. We are working closely with EPA to insure that implementing regulations accomplish this.

I would like to add, Mr. Chairman, the Corps has placed, and continues to place, a high priority on research to address the environmental aspects of dredging and dredged material disposal. We see this research commitment as a continuing high-priority requirement due to the complexity and environmental sensitivity of our navigation and regulatory responsibilities. I would also add that the Corps is now recognized internationally as a leader in dredging-related environmental research. Indeed, other nations now actively seek out the Corps advice in this area. I plan to continue this effort to insure that the best possible disposal decisions are made in the future.

We believe that there is no need to substantively amend the current statute at this time. As presently drafted, however, S.824 contains several provisions that could be misinterpreted or would lead to unnecessary obstacles to a reasonable and manageable ocean disposal program.

First, the proposed amendment to Section 102 should, in our opinion, be revised and clarified. Under Section 2(a)(2), the Bill includes a requirement that, in conducting an analysis of a site proposed for designation, the Administrator consider the "persistent effects on the ecosystem within the site." (lines 15-18, page 3). This proposed

requirement provides no clear intent or technical basis from which to develop meaningful scientific criteria to prevent unreasonable degradation. The Department of the Army interprets this language to be directed primarily toward possible persistent effects of chemical contaminants which could be incorporated into the tissues of valuable living marine resources to the extent that an unacceptable adverse impact to the marine environment would occur. In considering this amendment, it must be recognized that ocean disposal of dredged sediments will normally result in both short and long term physical impacts within the dump-site boundaries as long as dredged sediments are disposed of at the site. Accordingly, we do not consider this proposed amendment language as discouraging or limiting the use of designated ocean disposal sites for most dredged material. We request that this understanding be clarified prior to enactment of this legislation.

The inclusion of the element of economics as well as appropriate environmental factors in the site designation and site management process and in any proposed amendments to the Ocean Dumping Act would ensure appropriate consideration by both the Administrator and the Secretary, of the practical aspects of using ocean dredged material disposal sites. The extensive ocean research that is now available, including EPA studies of the Corps' historically used sites, clearly demonstrates that, in most cases, environmental impacts associated with dredged material disposal within the nearshore ocean environment are much less than those associated with disposal further offshore. Indeed, these recent EPA site surveys indicate that nearshore disposal

can quite often be highly beneficial in nature. However, I am particularly concerned about the trend to require ocean disposal of dredged material at great distances from where the dredging takes place. This has been required even in the absence of scientific evidence showing that there are environmental benefits commensurate with the additional costs of such requirements. These cost increases can be quite significant. For example, over \$40 million in additional cost would be required in deepening Norfolk Harbor to 55 feet if an ocean disposal site only seven miles farther out to sea were used in lieu of the historically used site. The trend is based on a generally held, but erroneous assumption that disposal of dredged material further off-shore equates in all cases to reduced environmental impact. However, there is no scientific basis for such an assumption. Certainly, in some site-specific cases, the additional costs of more distant disposal may be warranted by the adverse environmental consequences of closer, less expensive disposal.

It is also essential that ocean disposal sites be located as close to the dredging activity as practicable to allow timely restoration of critical navigation in the event of dredging emergencies resulting from such natural phenomena as major floods and hurricanes. We do not propose that environmental safeguards be diminished, but we would not want the Act to unnecessarily inhibit timely and efficient maintenance of navigation projects.

With regard to the bill's proposed addition of Section 102(c)(2) to the Act, the Department of the Army fully supports the judicious use of monitoring as an effective and essential regulatory tool in the management of ocean disposal sites. However, we strongly believe that monitoring should be used only where the nature and quantity of material dumped, or potential threat to site-specific resources justify the additional costs of such monitoring. We recommend that, in the Committee's deliberations concerning this section of the amendment and other sections, the Secretary of the Army be clearly assigned a significant role in the management and monitoring of ocean dredged material disposal sites, commensurate with our responsibilities for maintaining navigation, our assigned regulatory responsibilities under Section 103 of the Ocean Dumping Act, and our established technical expertise and active participation in this area.

As introduced, the bill would also require that the Administrator and the Secretary establish and maintain "quality assurance programs to ensure the validity, accuracy, and sufficiency" of information submitted in connection with permit applications. The Department of the Army has developed a quality assurance program to be used in connection with our Section 103 program and which will be incorporated into planned revisions of technical implementation manuals for Ocean Dumping Criteria. We recognize, however, that such a program could never provide absolute assurance of accuracy, validity, and sufficiency of data. Therefore, we recommend that the word "concerning" be substituted for the words "to ensure" in line 14 on

page 6. This wording would create a more realistic and common-sense provision, and would reduce the likelihood that the Federal courts would supplant the proper administrative role of the Executive Branch agencies (i.e., Army and EPA) in deciding what is needed to "ensure" quality assurance.

In closing, Mr. Chairman, I again reiterate, in our view, there is no need to substantively amend the current statute at this time. The Army appreciates the opportunity to present our views on this important subject. I will be glad to respond to your questions.



NATIONAL WILDLIFE FEDERATION

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STATEMENT OF KENNETH S. KAMLET, ON BEHALF OF
THE NATIONAL WILDLIFE FEDERATION, AT HEARING ON
REAUTHORIZATION OF TITLE I OF THE MARINE
PROTECTION, RESEARCH, AND SANCTUARIES ACT, BEFORE
THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
UNITED STATES SENATE, JULY 30, 1985

Mr. Chairman and Subcommittee Members:

I am Kenneth S. Kamlet, Director of the Pollution and Toxic Substances Division of the National Wildlife Federation. The Federation, on behalf of its 4.5 million members and supporters and its 52 state and territorial affiliates, has closely followed implementation of the Ocean Dumping Law over the past dozen years.

During this period, we've filed several lawsuits against EPA and the Corps of Engineers; we've testified on dozens of occasions before several Committees of Congress; we've worked closely with the several concerned administrative agencies; we've served as a nongovernmental member of several U.S. delegations to meetings of the London Dumping Convention; we've written extensively on various ocean dumping issues; and we've served on a number of government advisory committees and work groups on the subject (including our current membership on the Marine Board of the National Academy of Sciences/National Academy of Engineering).

Throughout the years, and in the course of these various efforts, our marine protection efforts have been guided by three main principles:

-Persistent toxic wastes, to the extent they cannot be reduced or eliminated at the source or destroyed, should be isolated and contained; dispersal of such materials in the ocean (or other open water) environment is inappropriate and unjustifiable.

-Dispersal of wastes in the ocean is appropriate for only a limited range of biodegradable or otherwise readily assimilable materials, such as nutrients (under suitable conditions), acids, alkalis, and readily degradable organic matter.

-Because the ocean is a global commons not subject to private ownership or to normal marketplace protections, it is incumbent upon national governments to intervene and apply special safeguards to ensure that the world ocean is not exploited for the benefit of a few at the expense of all.

In response to the Subcommittee's kind invitation to testify, this statement addresses the following eight issues:

1. S. 824, Senator Lautenberg's proposed "Ocean Revitalization Act of 1985" (including a comparison with legislation developed on the House side).

2. Likely trends in the future demand for ocean dumping in response to the 1984 RCRA amendments limiting land disposal options (and in the face of the so-called "Sofaer decision" on ocean dumping).

3. The proposed shift of sludge dumping in the New York Bight from the 12-mile to the 106-mile site.

4. The ocean dumpsite designation issue (and EPA's "voluntary EIS" policy).

5. Surveillance and enforcement issues relating to dumping at the 106-mile site.

6. Ocean dumping user fees and permit processing fees.

7. Liability issues.

8. Need for comprehensive dredged material management plans within each Corps of Engineers district and for each major coastal port.

1. S. 824 ("Ocean Revitalization Act of 1985")

a. The Lautenberg bill

The Lautenberg bill (S. 824) would promote each of the following objectives:

(a) Ocean dumping of municipal sludge would be prohibited after 1986, unless the treatment plant operator is in compliance with all Clean Water Act requirements for an effective and comprehensive industrial pretreatment program (§ 2(a)(1)).

(b) Approved ocean dumping sites could not be designated by the EPA Administrator until the Administrator undertakes and completes an analysis of the characteristics of the site and its suitability for dumping and of the environmental effects which would likely result from the dumping (§ 2(a)(2)). This would not apply to sites receiving "interim designation" before July 1, 1982 (§ 4).

(c) The Administrator, in analyzing each proposed dumping site, would have to specifically take into account four factors, including the projected inputs of pollutants from dumping and other sources into and adjacent to the site, and the ability of the site to assimilate these pollutants (§ 2(a)(2)). (This would also be subject to the "grandfather" provision of § 4).

(d) The Administrator would be required to periodically monitor the effects of dumping in and around each site (for which he determines such dumping is necessary), and every three years he would be required to project the extent of dumping and other waste inputs to occur in and around each site during the next three-year period (§ 2(a)(2)).

(e) If the Administrator at any time determines that a site is no longer suitable for dumping, he would be required to either limit or suspend or terminate dumping at the site (including the site's designation as an approved dumpsite) (id.).

(f) Ocean dumping permits would be required to designate and include any special provisions deemed necessary to minimize the harm from dumping, including measures to be taken by the permittee to develop and implement alternative methods and locations for waste disposal and recycling, and processes for reducing or eliminating contaminants in the waste (§ 3(1)).

(g) EPA and the Corps would be required to establish and maintain quality assurance programs (§ 3(2)).

(h) EPA and the Corps would be authorized to prescribe appropriate reporting requirements by permittees (§ 3(3)).

(i) Criminal penalties would be established for persons who knowingly provide false information in ocean dumping applications, reports, etc. (§ 6).

(j) The Administrator would be required to submit to Congress within a half year of enactment a schedule for expeditiously completing the study and designation of all ocean areas subject to interim designation prior to July 1, 1982 (§ 7).

(k) EPA would be barred from issuing or renewing any permit for the ocean dumping of sewage sludge within the New York Bight Apex beyond 18 months from the date of enactment (§ 8).

(l) Within three years of enactment, in accordance with a detailed schedule to be submitted to Congress within six months, EPA would be required to prepare, in consultation with relevant Federal, state, and interstate agencies, and submit to Congress a "New York Bight Apex, Hudson-Raritan Estuary Restoration Plan". Among other things, the Plan would devise a schedule of economically feasible projects to control contaminant inputs to the Apex and Estuary and to remove impediments to the cleanup of these inputs. It would also develop recommendations for funding and coordinating the various governmental programs necessary to implement the projects devised by the Plan (§ 8).

(m) Within 18 months of enactment, EPA would be required to prepare and submit to Congress a comprehensive assessment of the land-based disposal options for municipal sludge generated by current ocean-dumpers (§ 8).

b. Additional Provisions in the House Bill

Although S. 824 parallels most of the provisions of H.R. 1957, as approved by the House Committee on Merchant Marine and Fisheries (H.R. Rept. No. 107, Pt. 1, 99th Cong., 1st Sess., May 15, 1985), there are some notable differences:

(a) The House bill would bar continued ocean dumping of municipal sludge beyond 1986, unless two prerequisites (rather than one) are satisfied. Not only must the plant operator be in compliance with pretreatment requirements, but EPA must determine (in consultation with the Governor of the state) that a suitable land-based alternative to ocean dumping is not available (§ 2).

(b) The House bill would preclude use of funds authorized under Title I to wholly or partially finance any costs of ocean dumping (§ 2(3)).

(c) The House bill would require EPA and the Corps to prescribe and collect from all non-Federal applicants an application fee in an amount commensurate with the reasonable administrative costs incurred in processing the permit (to be deposited to the account used to carry out permit processing under Title I) (§ 3(2)).

(d) The House bill would require EPA to prescribe and collect a special fee for non-dredged material permits to recover the costs incurred in undertaking activities directly associated with permit issuance (including site designations), measures to determine permit compliance, assessment of direct dumping effects, and Federal surveillance and enforcement costs (this fee would be deposited to the account used to carry out activities associated with permit issuance) (§ 3(2)).

(e) The quality assurance program required by the House bill would be subject to annual reports to Congress on the status of implementation (§ 3(3)).

(f) The House bill would require EPA, within one year of enactment, to prepare and submit to Congress a report on the feasibility of establishing and implementing quality standards, including maximum permissible concentration limits, for municipal sludge constituents disposed of through ocean- or land-based methods (§ 4(b)).

(g) The House bill would strengthen the current LDC adherence provision of § 102(a) by requiring EPA and the Corps to adhere to and apply the requirements of the London Dumping Convention when implementing Title I (§ 5).

(h) The House bill includes a new definition of "monitoring" (§ 7).

(i) The House bill would give the district courts jurisdiction, upon the application of any person, to issue mandatory injunctions directing EPA to complete site designation proceedings in a timely manner (for sites with only interim designations). But dumping at interim approved sites could not be curtailed pending the completion of such site designation proceedings. Also, no attorneys' fees could be collected for successful mandamus actions under this provision (§ 9).

(j) The House bill would require the EPA Administrator by the day after enactment (rather than within six months) to submit to Congress a schedule for completing the designation of interim-approved ocean dumping sites (§ 10).

(k) The House bill would reinstate the annual reporting requirement previously imposed on the Army Corps of Engineers (§ 11).

(l) The House bill would prohibit the ocean dumping of all "harmful" municipal sludge (i.e., sludge which fails to meet EPA's environmental impact criteria) beyond, and all new applicants to dump "harmful" municipal sludge within, 18 months of enactment (§ 13).

(m) The House bill would extend U.S. ocean dumping jurisdiction over material transported from extraterritorial sources, to material dumped within the exclusive economic zone of the United States (§ 14).

(n) The House bill, finally, would amend the Act's "citizen suit" provision to make clear that enactment of the MPRSA was not meant to preempt any rights or liabilities under other Federal law (including federal maritime tort law and federal common law) with respect to damages caused by noncompliance with any MPRSA statutory or permit requirement (§ 15).

c. Comments Concerning S. 824 and H.R. 1957

Despite a number of differences, the pending House and Senate bills to reauthorize the Ocean Dumping Act have many (even most) elements in common. Predecessors to the House bill, embodying many elements of the present proposals, date back to December 25, 1981 ("Discussion Draft for H.R. 6113", 97th Cong., 2d Sess.). We have testified repeatedly since March of 1982, before various panels of the House Merchant Marine and Fisheries Committee, on most of the issues addressed by S. 824 and H.R. 1957. In the interests of brevity, we will reference here material discussed in much greater detail in other hearings, trying only to hit the highlights for purposes of the present testimony:

(i) Phase-Out of Sewage Sludge Ocean Dumping

In 1977, Congress amended the MPRSA to prohibit the ocean dumping after 1981 of sewage sludge which "unreasonably degrades" the marine environment. The Legislative History of this amendment clearly indicates that Congress intended that "unreasonable degradation" for this purpose be determined strictly on the basis of anticipated harm to the marine environment. However, a 1981 Federal district court decision (City of New York v. EPA), which then-EPA Administrator Anne Gorsuch steadfastly refused to appeal, held that sludge could be determined to be "unreasonably degrading" only if a balancing analysis demonstrated that the harms of ocean dumping outweighed the incremental costs and impacts of land-based alternatives.

This means that, sewage sludge, no matter how devastating to the marine environment, may not be barred from ocean dumping as long as any marine environmental degradation can be justified as "reasonable" based upon the higher costs of land-based alternatives. While the notion of using a "balancing test" to decide among alternatives is superficially appealing (isn't "balance" better than extremism or imbalance?), the problem is that the ocean is usually so much cheaper than any competing alternative that any analysis that gives a premium to economic costs will yield a very "unbalanced" result. The ocean will lose every time. (Even if a sufficiently stringent user fee were enacted, it is unlikely that the ocean's many enticements as a first-resort disposal option could be fully neutralized in this fashion. For example, even with the cost advantage removed, it would remain politically

attractive in many instances to avoid antagonizing voting constituents by use of land-based disposal options by going to the ocean--which harbors very few voters.)

For further background on the City of New York court decision, and on the 1981 legislative phase-out requirement, see Statement of Kenneth S. Kamlet, Before the Subcomm. on Oceanography and the Subcomm. on Fisheries and Wildlife Conservation and the Environment of the Comm. on Merchant Marine and Fisheries, House of Representatives, Hearing on Title I, Marine Protection, Research, and Sanctuaries Act, Ser. 20, 97th Cong., 1st Sess., June 4, 1981, at 100-107 [hereafter, "June 1981 Hearing"]; Statement of Kenneth S. Kamlet [before the same two Subcommittees], Hearing on Reauthorization of the Marine Protection, Research, and Sanctuaries Act, Titles I and II--H.R. 6112 and H.R. 6113, Ser. 40 [No. 141], 97th Cong., 1st Sess., March 23, 1982, at 311-17 [hereafter, "March 1982 Hearing"]; Statement of Kenneth S. Kamlet, Before the Subcomm. on Oceanography of the Comm. on Merchant Marine and Fisheries, House of Representatives, Hearing on Sewage Disposal in New York Bight, 98th Cong., 1st Sess., Ser. 26, May 25, 1983, pp. 107-09 [hereafter, "May 1983 Hearing"]; and Statement of Kenneth S. Kamlet, Before the Subcomm. on Oceanography and the Subcomm. on Fisheries, and Wildlife Conservation and the Environment, of the Comm. on Merchant Marine and Fisheries, House of Representatives, Hearings on Ocean Dumping--Part 2 [H.R. 4829, H.R. 4492, H.R. 4491, and H.R. 4364], 98th Cong., 2nd Sess., Ser. 39, pp. 84-85, March 1, 1984 [hereafter, "March 1984 Hearing"].

Comment: We endorse the proposed 18-month phase-out of sludge dumping in the Bight Apex, as contained in both bills. (It should be noted, however, that the bills merely prohibit EPA from issuing or renewing any permits for this purpose after 18 months; unfortunately, by the terms of the City of New York court decision, the dumping may continue indefinitely at the 12-mile site until EPA gets around to issuing new permits--so, there is no particular pressure on EPA to issue a new set of permits quickly. Even once a new permit is issued, there is nothing to compel revocation of permission to dump at the 12-mile site within 18 months of enactment, or at any time prior to the expiration of the term of a new permit. So, if EPA decided that the municipalities qualify for 3-year "special" permits, the amendment would theoretically allow the dumping under such permits to continue for up to 18 months plus 3 years, i.e., a total of 4½ years. This much latitude to delay is clearly excessive and the language should be strengthened to confine EPA's discretion within more appropriate bounds.) We also endorse the prohibition in both bills against continued dumping of sludge which is not fully in compliance with industrial pretreatment requirements. (A municipality that allows its industrial dischargers to contaminate the sludge the municipality produces should not be free to dump that sludge in the ocean.) The further requirement which the House bill would impose, i.e., that there first be a determination that no suitable land-based alternatives are available, would be an appropriate and desirable addition to the Senate bill.

We also endorse, and commend for incorporation in the Senate bill, § 13 of the House bill, which would undo the City of New York decision and make clear that "harmful" municipal sludge can no longer be dumped anywhere in the ocean beyond 18 months after enactment. This so-called "Carper" amendment, which is not expected to affect current sludge-dumpers, is intended to prevent municipalities which do not now dump their sludge in the ocean from seeking to do so in the future--at least to the extent such sludge is deemed "harmful", based on EPA's environmental impact criteria.

(ii) Ocean Dumpsite Designations

The existing Ocean Dumping Act incorporates by reference a requirement of the London Dumping Convention that ocean dumping permits be issued "only after careful consideration of... prior studies of the characteristics of the dumping site." The Act also authorizes the Administrator of EPA to designate recommended sites for ocean dumping after considering the criteria established pursuant to Section 102(a). The Corps of Engineers also has the authority, under Section 103(b), to select dumping sites, after performing the required site studies, where it is not "feasible" to use a site designated by the Administrator.

The 1977 Ocean Dumping Regulations and Criteria gave EPA and the Corps of Engineers three years in which to complete site studies on 127 dredged material ocean dumpsites. Any sites that had not been redesignated or studied within this period were to be phased out. The three years expired on January 11, 1980. But during that period, site studies were not completed for a single dredged material ocean dumpsite. On January 16, 1980, EPA published

an amendment to the Regulations, extending the interim designation of 46 unstudied dredged-material ocean dumpsites for up to three more years. The amendment also extended the interim designation of

85 additional unstudied dredged material ocean dumpsites (total: 131) for an indefinite period of at least three years. This extension was further revised in the Federal Register of December 9, 1980. The only justification provided by EPA for its failure to make more progress on ocean dumpsite studies was "current budget priorities and constraints".

In an effort to persuade EPA and the Corps to give the matter higher priority, NWF filed suit against EPA and the Corps on February 11, 1980, in Federal District Court for the District of Columbia. This lawsuit yielded a "Stipulation of Settlement and Dismissal," approved by the Court on September 25, 1980. The major elements of the settlement were:

(a) The Corps agreed to issue a guidance memorandum to each District and Division Engineer specifying procedures to be followed in determining whether to issue an ocean dumping permit for disposal of dredged materials at interim designated dumpsites. The Headquarters' directive would require the District Engineer, before authorizing dumping at an incompletely studied or interim designated site to consider: (1) the feasibility and practicability of using a finally designated ocean dumpsite or a more fully studied dumpsite in lieu of an unstudied one; (2) the feasibility and

practicability of deferring the decision on ocean dumping at the proposed site until site study and/or final designation efforts have been completed; and (c) the availability of practicable alternative locations and methods of disposal or recycling (i.e., land-based alternatives). Public notices announcing proposed dumping at interim-approved ocean dumpsites would be required to include the District's preliminary assessment of whether or not there are reasonably available alternatives to dumping at such a site, together with a short explanatory statement.

(b) The Corps agreed that, as a matter of policy, undesignated ocean dumpsites (i.e., sites which are not either interim-approved or finally designated), "will not under normal circumstances be used."

(c) EPA agreed, in promulgating a revised version of the January 16, 1980, site designation list, to delete from the list of interim approved sites those sites which are no longer in use and for which no future need is anticipated, and those sites which EPA, in consultation with the Corps, determines are unsuitable for further ocean dumping.

(d) EPA agreed to promulgate regulations which specify an explicit schedule for completing environmental impact statements and final designation or termination of specific dumpsites in 20 coastal areas that account for 90% of all U.S. dredged-material ocean dumping. EPA and the Corps separately agreed to discuss further with NWF the feasibility of setting similar schedules for the remaining interim approved dumpsites. The agreed-upon schedule provides for the completion of final site designations in all 20 areas by the end of March 1983.

(e) EPA agreed to send a letter to all coastal state and Federal fish and game agencies requesting information on the proximity of interim dumpsites to commercial and recreational fishery resources. EPA further agreed that any responses received "will be considered as part of the administrative record by EPA in assessing the suitability of dumpsites for final designation."

(f) EPA and the Corps agreed to expeditiously pursue the actions agreed upon, with such actions completed "no later than 24 November 1980."

(A copy of the Settlement Agreement can be found in the June 1981 Hearing, supra, pp. 145-153.)

The current status of EPA's ocean dumpsite designation efforts can best be summarized by reference to EPA's most recent Federal Register notice on the subject, 50 Fed. Reg. 6942-43, Feb. 19, 1985, a copy of which is appended as EXHIBIT I.*/ This notice indicates that, just prior to the March 1983 deadline set for completion of site designations at all consent decree sites, EPA again extended their period of use (until January 31, 1985) as interim sites (48 Fed. Reg. 5557, Feb. 7, 1983). A year later, the San Francisco Channel Bar site interim designation was also extended until that date (49 Fed. Reg. 8923, March 9, 1984). The notice issued on February 19th of this year is simply the latest in a long list of extensions. This notice extended the interim designation of seven consent decree sites (Humboldt Bay, CA; Long Beach, CA; San Diego, CA; New Jersey/Long Island Sites; Gulfport/Mobile/Pensacola; Coos Bay, OR; and San Francisco Channel Bar, CA) and three subsequently added interim sites (Morehead City, NC; Georgetown, SC; and

* Retained in committee files.

Pascagoula, MS) "until December 31, 1988, or until final rulemaking is completed, whichever is sooner."

During the three-year period, from February 19, 1982 (see, June 1982 Hearing, p. 89), to February 19, 1985, EPA has managed to complete only one Final Site Designation EIS (for the San Francisco Channel Bar site) and three Draft EIS's (for the Pensacola-Mobile-Gulfport sites; the New Jersey-Long Island Inlet sites; and the Coos Bay site). Although the February 19th Federal Register notice asserts that "EPA plans to complete EIS's for all consent decree sites... by the end of 1985," as of five months ago, work had not yet begun on the San Francisco 100 Fathom site and it had barely begun for the Long Beach and San Diego sites.

For further background on the site designation issue, see the June 1981 Hearing, supra, pp. 107, 145-153; the Hearing Before the Subcomm. on Water Resources of the Comm. on Public Works and Transportation, House of Representatives, on H.R. 6113, to Amend Title I of the Marine Protection, Research and Sanctuaries Act of 1972, 97th Cong., 2d Sess., Ser. 71, pp. 214-18, 221-39, June 16, 1982 [hereafter, "June 1982A Hearing"]; the March 1982 Hearing, supra, pp. 311-13, 318-20; the Hearings Before the Subcomm. on Oceanography and the Subcomm. on Fisheries and Wildlife Conservation and the Environment of the Comm. on Merchant Marine and Fisheries, House of Representatives, on Reauthorization and Oversight of Title I (H.R. 1761), 98th Cong., 1st Sess., Ser. 14, March 15, 1983, pp. 290-91 [hereafter, "March 1983 Hearing"]; and the March 1984 Hearing, supra, pp. 83-84.

Comment: The elements of the House bill relating to site designation were the product of a carefully crafted compromise among environmental and port (dredging) interests. The bill was designed to "grandfather" sites with interim-approved status prior to July 1, 1982, so that the prohibition against designating unstudied sites, could not be applied to deprive the dumpers utilizing these sites in good-faith of the continued use of these sites until the designation process was completed. Instead, the bill would establish a new "mandamus" procedure to enable any person to obtain a court order to compel expeditious completion by EPA of site designations at individual sites. (S. 824 contains the House bill's "grandfather" provision to protect dumpers at interim-approved sites, but lacks the mandamus authority to speed up the designation process.) Both bills would require EPA to develop and submit a schedule for expeditiously completing the study and designation of all interim-approved sites. And both bills would strengthen site monitoring and site revocation authorities and would limit the ability to designate new interim sites in the future. (However, only the House bill would strengthen the Act's Convention adherence requirements.)

Since all of these elements were integral to the carefully crafted compromise reflected in the House bill, we would strongly urge this Committee to restore the mandamus and Convention adherence provisions (contained in the House bill) to the Lautenberg bill.

(iii) Convention Adherence

Among the other important provisions of the London Dumping Convention (LDC), the global treaty on ocean dumping, are the following prohibitions, contained in Article IV:

1. In accordance with the provisions of the Convention, Contracting Parties shall prohibit the dumping of any wastes or other matter in whatever form or condition except as otherwise specified below:--

a. The dumping of wastes or other matter listed in Annex I is prohibited...

* * *

2. Any permit shall be issued only after careful consideration of all the factors set forth in Annex III, including prior studies of the characteristics of the dumping site, as set forth in Sections B and C of that Annex.

* * *

(Annex I includes organohalogen compounds, such as PCBs, mercury and cadmium compounds, persistent synthetic materials, oils taken on board for dumping, high-level radioactive wastes, and biological and chemical warfare agents--except that the dumping prohibition doesn't apply where they are "rapidly rendered harmless", or where the first five of the enumerated constituents are present only as "trace contaminants".)

As amended by Public Law 93-254, 88 Stat. 51 (Mar. 22, 1974), § 102(a) of the MPRSA specifies:

...To the extent that he may do so without relaxing the requirements of this subchapter, the Administrator, in establishing or revising [ocean dumping] criteria, shall apply the standards and criteria binding upon the United States under the Convention, including its Annexes.

Although the intent of the 1974 amendment was clearly to make the LDC's requirements, to the extent they were more stringent than those under prior domestic law, fully binding on the U.S. as a matter of both domestic and international law, ambiguities have developed over the years which warrant clarification.

First, what are LDC "standards and criteria" and are there any LDC "requirements" which are not "standards and criteria" to which the U.S. is bound? It should be made clear that all binding LDC requirements are transferable to U.S. law. Second, does the Administrator's obligation to "apply" Convention requirements "in establishing or revising" the ocean dumping criteria, compel him to apply the LDC's "prior study" requirement before designating approved ocean dumpsites (or bar him from approving such sites on an interim basis without the benefit of such "prior studies")? One would have thought so. However, the D.C. Circuit, in NWF v. Costle I, 629 F.2d 118, 126 (D.C.Cir. 1980), held that the 1974 Convention adherence requirement "does not by its terms apply to either the application of criteria to permit applications or the designation of dumping sites." It is necessary, therefore, as the House bill would do, to explicitly require the Administrator and the Secretary (i.e., EPA and the Corps) to "adhere to and apply" the Convention's requirements. Finally, as the House Committee report has noted (H.R. Rept. No. 107, Pt. 1, 99th Cong., 1st Sess. 19, May 15, 1985), "because of the placement of the amendment in the section authorizing EPA to develop criteria for issuing ocean dumping permits (section 102(a)), questions have been raised about whether the requirements of the Convention apply to

all the other activities of EPA and the Corps under the Act." A new, free-standing Convention adherence amendment is needed to make clear that all the actions of EPA and the Corps pursuant to the Act must comply with our international obligations under the LDC.

Comment: We strongly urge incorporation of an appropriate Convention adherence amendment in S. 824.

(iv) Periodic Monitoring and Site Suspension Authority

Section 104(d) of the MPRSA specifies that, "any permit issued under this subchapter shall be reviewed periodically and, if appropriate, revised." It also authorizes the Administrator or the Secretary to "limit or deny the issuance of permits, or... alter or revoke partially or entirely the terms of permits issued by him... for... specified materials or classes of materials, where he finds that such materials cannot be dumped consistently with the criteria and other factors required to be applied in evaluating the permit application." And, although § 107(c) requires the Coast Guard to conduct "surveillance and other appropriate enforcement activity", and § 201 requires NOAA to "initiate a comprehensive and continuing program of monitoring and research regarding the effects of [ocean dumping]," there has never been adequate or systematic monitoring or management at individual ocean dumping sites--i.e., to ensure that the initial decision to allow dumping there is still a valid one.

Comment: The proposed requirement of both S. 824 and H.R. 1957 that the Administrator periodically monitor the effects of dumping in and around each site, with triennial projections of future

dumping inputs and impacts, is a commendable and long-overdue innovation. So is the proposed mandatory requirement that the Administrator limit or suspend dumping at a site whenever he determines that the site is no longer suitable for dumping.

(v) Quality Assurance Program and Criminal Penalties

The MPRSA is currently one of the few environmental laws which lacks criminal penalties for knowing data falsification. It also lacks specific provision for checking the work and quality of commercial testing laboratories. (This is especially important in the ocean dumping program which depends heavily on the results of bioassay and bioaccumulation tests, frequently carried out by commercial laboratories.) As we documented at the March 1983 Hearing, supra (see pp. 323-26), it is not unknown for a testing laboratory (presumably, seeking to maintain a good rapport with its clients) to retest a sample that flunks a bioassay test, until it passes, or even to take and test a new sample which passes, to replace an earlier sample which flunked. Such forms of data falsification should not go unpunished or undeterred. Similarly, there have been cases where a would-be ocean-dumper has taken a sample from one commercial testing laboratory to another, until one yielded the desired result. Clearly, some kind of quality assurance program is needed to ensure that all commercial testing laboratories have at least a minimal level of technical competence and are able to generate at least internally consistent results.

Comment: The amendments on quality assurance and criminal penalties, as contained in both S. 824 and H.R. 1957, are much-needed and deserve the support of every member of this Committee and of the Senate.

(vi) Ocean Dumping User Fees

For the past several years, the Administration has supported inclusion in ocean dumping reauthorization bills of a user fee provision designed to recover the direct costs of the Federal Government's ocean dumping program from the industrial and municipal users of these services. It would cover the costs related to site designation, program operations, and site and compliance monitoring related to ocean dumping activities. One possible implementation scheme, described by an EPA witness in 1983, would involve imposition of a standard cost per ton on wastes ocean-dumped, with an initial assessment at the beginning of the year based on projected tonnages, followed by end-of-the-year adjustments, based on actual dumping patterns.

S. 824 is silent on the user fee question. H.R. 1957 would create two different types of fees. The first is an application fee, to be set at an amount commensurate with the reasonable administrative costs incurred in processing the permit application. The second is a "special fee" to recover the costs incurred in undertaking activities directly associated with permit issuance (including site designations), measures to determine permit compliance, assessment of direct dumping effects, and Federal surveillance and enforcement costs.

Comment: NWF strongly supports the concept of user fees in the context of ocean dumping. The ocean is a resource held in common for all citizens, but is underpriced and in danger of being overused for waste disposal. An ocean dumping user fee would

supplement regulatory control, deter unnecessary ocean dumping, and spur the research and utilization of economical and environmentally sound alternatives. Even the House bill falls short, however, in two respects. First, ocean dumping fees should be levied for all classes of ocean-dumped materials, including dredged material. Second, ocean dumping fees should relate to fair market value (of the ocean as a disposal site) rather than simply keeping the Federal Government whole for its administrative expenses of the dump site designation and permitting program--although recouping the Government's costs is at least a step in the right direction.

(vii) New York Bight Restoration Plan and Apex Dumping Ban

The Apex dumping ban for sewage sludge has been in the making since at least 1977. As embodied in both S. 824 and H.R. 1957, it would take the form of a shift of sludge dumping activities from the 12-mile site (historically used for this purpose) to the 106-mile site (historically used for industrial wastes). Congress had initially sought to promote a total end to ocean dumping of sewage sludge (at least of the more "harmful" sludges which were prevalent a decade ago). However, since the New York Bight Apex receives contaminants from a multiplicity of sources in addition to sewage sludge, a frequently heard objection was that: "Even if you force me out of the ocean, there won't be any noticeable improvement in the quality of the Apex environment." The New York Bight restoration or revitalization plan, as reflected in both S. 824 and H.R. 1957, commendably seeks to deal with the problem

of the severely degraded state of the New York Bight Apex as a whole, in a systematic fashion. But, it recognizes as well that putting a stop to direct dumping of sewage sludge into the Apex is an essential psychological, if not substantive, prerequisite to accomplishing an effective restoration of the Apex.

EXHIBIT II, attached to this statement,* is a copy of our analysis of EPA's tentative decision last year to close the 12-Mile New York Bight Sewage Sludge Ocean Dumpsite. This decision was finalized this spring in an April 11th Federal Register notice (50 Fed. Reg. 14335).

Comment: The plan contemplated by S. 824, quite properly addresses contaminant inputs to (and cleanup of) the Hudson-Raritan Estuary, as well as the Bight Apex proper--recognizing that the two are closely interrelated. (H.R. 1957 focuses more directly on the Apex.) S. 824 does not, however, require EPA to set maximum permissible concentration limits for municipal sludge contaminants disposed of through ocean- versus land-based methods. The existence of a common data base in this regard would undoubtedly promote more effective multi-media assessment of sludge disposal impacts.

(viii) Citizen Suits and Other Federal Law Remedies

The House bill seeks to reaffirm Congress's original intent in including a "savings clause" in the MPRSA's citizen suit provision, by reversing the result of the National Sea Clammers Supreme Court decision (which construed the citizen suit provisions of the MPRSA and the Clean Water Act as foreclosing actions for tort damages which could have been brought in the absence of these

* Retained in committee files.

statutes). The provision makes clear that enactment of the MPRSA was not meant to preempt any rights or liabilities under other Federal law (including Federal maritime tort law and Federal common law) with respect to damage caused by noncompliance with any requirement of the MPRSA or any permit issued pursuant to it.

Comment: We'd urge the Senate Committee to go at least as far as the House bill has in this regard. (One desirable improvement would be to exempt from liability in a damage action only noncompliance with any requirement of the Act or with any "specific requirement of" any permit issued under the Act--to make clear that toxic pollutants not expressly addressed in a permit do not create immunity from a subsequent action for damages caused by these unaddressed pollutants.)

2. Likely Trends in the Future Demand for Ocean Dumping

At least two surveys (one by NOAA; one by the General Accounting Office) suggest that, were the opportunity afforded, a large number of coastal municipalities not currently engaged in ocean dumping would be enticed to the practice. One assessment projected a threefold increase in demand for the ocean in less than a decade.

In addition, last year's reauthorization of the Resource Conservation and Recovery Act (RCRA), which further tightened the restrictions on land-based disposal of hazardous wastes, could well provide added impetus to explore the ocean option for hazardous wastes denied ready access to the land. At least two major ongoing assessments of ocean disposal prospects--a multi-year study by the Office of Technology Assessment, and a half-completed consensus

project of the Keystone Center in Colorado--appear to take as a given that new demands may well be made in the near future on the ocean as a disposal medium.

It is important, therefore, that Congress give a firm signal to those who cast covetous eyes on the ocean that persistent toxic wastes are not fair game for disposal-oriented methods--whether on land or at sea. For such wastes, landfilling and dispersion from a barge both represent an equivalent abdication of management responsibility and should be prohibited as a matter of public policy.

3. The Proposed Shift of Sludge Dumping from the 12-Mile to the 106-Mile Site

See EXHIBIT II for our general views on this subject.

Earlier this month, on July 9th, EPA Region II announced that it had negotiated phase-out schedules (from the 12-mile to the 106-mile site) with nine New York and New Jersey sludge-dumping municipalities, but that this phase-out would not be complete until December 31, 1987--a phase-out period of about 30 months.

We were pleased that specific phase-out schedules were established, but were surprised and dismayed that the phase-out would take so long to accomplish.

EPA attributed the longer-than-expected lead-times to "economic and technical feasibility factors." In the case of the private barge fleet (i.e., to handle Nassau's and New Jersey's sludge), because of the increased length of the trip, the fleet was said to

"fall short in present capacity to haul all of the sludge to the deepwater site" and that "additional equipment and increased sludge storage capacity would have to be added." (The New Jersey municipalities wish to pursue this as a joint venture.) In the case of New York City, the City would evidently prefer to expand and update its current fleet of self-propelled sludge barges. The first of three new large barges is not due to be in service until July 1987. The renovation of an existing barge will be completed by April of 1986, with that vessel ready to begin carrying 10% of the City's sludge to the 106-mile site by May. (The City apparently indicated that, if necessary, it would contract privately for additional barge service to ensure that the 10% commitment is met.)

We're not in a position to second-guess this assessment, but a number of questions do occur to us:

1. Is the desire of the New Jersey municipalities to pursue phase-out requirements as a joint venture (with attendant requirements for approval by the State Legislature) a sufficient reason to slow down the process?
2. Is New York City's desire to renovate and expand its own fleet, rather than rely on commercial sources, sufficient reason to delay the process?
3. Will New York City make any effort to earmark the 10% of its sludge which is most heavily contaminated for the first barge loads to the 106-mile site (three of the City's 12 treatment plants are far more heavily industrialized than the rest)?

4. Since the New York and New Jersey sludges are 97-99% water, has the feasibility been explored of creating new barge capacity quicker by reducing the water content of the sludge?

5. Since tankers and other merchant ships are lying in drydock and at anchor all up and down the coast, have the municipalities explored the possibility of temporarily utilizing idle tankers or other merchant vessels to transport sludge to the 106-mile site?

4. The Ocean Dumpsite Designation Issue

We've discussed this at some length above, except for the issue of possible changes in EPA's "Voluntary EIS" policy.

During the evolution of the judicial interpretation of the National Environmental Policy Act (NEPA), the federal courts have generally supported EPA's position that it is not legally required to comply with NEPA (in terms of preparing a formal Environmental Impact Statement) in connection with so-called environmentally protective regulatory activities--at least to the extent that the "functional equivalent" of an EIS could be said to exist.

However, since 1974, EPA has "voluntarily" committed itself to prepare EIS's in connection with the promulgation or significant revision of ocean dumping criteria under section 102(a) of the MPRSA (as well as for other enumerated activities). See, 39 Fed. Reg. 16186 (May 7, 1974) (statement of policy--§ 1(d)); 39 Fed. Reg. 37419 (Oct. 21, 1974) (procedures for voluntary

preparation--§ 1(c)(4)). Although EPA may view these commitments as "voluntary", it is unlikely that a court would view them as other than binding regulatory obligations (unless and until they are formally rescinded via appropriate notice and comment rulemaking).

Furthermore, with respect at least to the "consent decree" dumpsites, the court-approved settlement agreement in NWF v. Costle II obliges EPA to prepare a draft and final site designation EIS in support of each integral site designation decision. (It would probably not be inconsistent with the settlement agreement, however, for EPA to address a group of functionally- or geographically-related dumpsites in a single EIS.)

EPA has shown recent signs of unhappiness with aspects of its "voluntary EIS" policy. For example, in the context of ocean dumpsite designations, the Agency sees itself bound to prepare formal EIS's even for seldom-used sites with little prospect of significantly impacting the environment.

NWF remains adamantly opposed to any relaxation of the "voluntary EIS" policy with respect to "consent decree" dumpsites and any other dumpsites presenting a colorable risk of significant impacts to the environment. However, we are all in favor of significantly streamlining the EIS process, to minimize useless "boilerplate" and to maximize thoughtful analysis. We also have no objection to combining the analysis of multiple functionally- or geographically-related dumpsites in the same EIS.

We do not, however, object to modifying the "voluntary EIS" policy to require formal EIS's only in connection with environmentally significant Agency actions. Where such actions are found to be environmentally insignificant--as documented by an environmental assessment

and negative declaration--a formal EIS should not be required. We would not oppose a legislative or regulatory amendment making clear this distinction.

5. Surveillance and Enforcement Issues

With the impending shift of millions of wet tons of sewage sludge from the 12-Mile Sewage Sludge Ocean Dumpsite, to the 106-mile site--more than 100 miles further out to sea--guarding against inadvertent or intentional "short-dumping" (the practice of releasing the sludge "cargo" prematurely prior to arriving at the assigned ocean dumpsite) will become an increasingly pressing need.

Under the MPRSA (§ 107(c)), it is the responsibility of the U.S. Coast Guard to "conduct surveillance and other appropriate enforcement activity to prevent unlawful transportation of material for dumping, or unlawful dumping." However, the Coast Guard's track record of ocean dumping surveillance and enforcement has been less than exemplary. In the early days of the ocean dumping program, the Coast Guard set itself a target of 90% surveillance of toxic chemical dumping (which it defined as being restricted to chemical wastes dumped at the 106-mile site), and 10% surveillance of non-toxic waste dumping (which it defined as everything else). Use of Coast Guard shipriders to periodically accompany ocean dumping barges was the principal surveillance technique employed (although one would assume that the risk of an illegal dump would be far greater on days when the shiprider wasn't

around than when he was). This was supplemented by unscheduled (i.e., coincidental) observations of dumping vessels by Coast Guard ships and aircraft engaged in other missions. Purposeful ocean dumping surveillance missions have become less and less frequent over the years.

Indeed, even though the Coast Guard has delegated back to the U.S. Army Corps of Engineers (under a Memorandum of Understanding between the two agencies) nearly all its surveillance and enforcement responsibilities vis-à-vis dredged material--which accounts for nearly 90% of all ocean dumping--there has been no noticeable improvement in the Coast Guard's surveillance and enforcement efforts in relation to the remaining ten percent of ocean dumping. Whether or not this circumstance was ever tolerable in the past, it will clearly be neither acceptable nor tolerable in the future once sludge dumping begins at the 106-mile site on a large scale.

It is ironic that the Coast Guard identified, and then proceeded to abandon, a potentially ideal solution to this dilemma nearly six years ago.

Specifically, on December 13, 1979, the Coast Guard proposed in the Federal Register (44 Fed. Reg. 72188-199) a regulation which would have required waste transporters to install electronic surveillance equipment on vessels engaged in ocean dumping. The proposal noted that "installation of this equipment will result in increased surveillance, while reducing overall costs and that, "although the cost to the dumping industry will increase because of equipment requirements, the total cost of surveillance of ocean dumping operations will decrease."

In addition to the large cost to the Coast Guard in manpower and resources of traditional surveillance methods, there were other justifications for the proposal to implement an Ocean Dumping Surveillance System (ODSS):

Vessels and aircraft are relatively ineffective during inclement weather or fog or at night, when some ocean dumping occurs. Several dumpsites are located far enough offshore to be out of range of some Coast Guard aircraft and require a great deal of vessel time for coverage. Shipriding, the placement of Coast Guard personnel on vessels engaged in dumping, does provide coverage despite these conditions, but it is also costly in terms of personnel time. For example, the 179 shiprider missions conducted during 1978 required 8,262 manhours and represented only 17% of all missions conducted that year.

The proposed ODSS was described as follows:

This system provides a record of an ocean dumping mission on cassette tape provided by the Coast Guard by periodically recording geographic movements of the vessel, the times when the mechanisms for dumping cargo are activated, and data identifying that mission. The vessel's location is determined by a Loran-C receiver, one of the ODSS components. Input from this component is fed to a digital cassette recorder and recorded every ten minutes. Electronic sensors placed on the devices which activate the dump mechanisms provide data to the recorder indicating whether or not dumping is in progress. When the cassette tape is used up (or within two weeks after beginning the recording, whichever occurs first), it is proposed that the vessel owner or operator see that the tape cassette is delivered to the Coast Guard. The Coast Guard, in turn, analyzes the tape at its own facility.

Although the Federal Register notice projected that each ODSS would cost \$10,000, with a one-time installation cost of another \$1,000 to \$2,000 and an annual maintenance cost of \$2,000 for each system, the estimated costs of an equivalent Coast Guard surveillance program were significantly greater. The estimated

five-year initial cost of the ODSS system, for the 100 vessels involved in ocean dumping in 1979 was \$2.2 million. By contrast, the cost of surveillance over 100% of EPA permitted ocean dumping activity alone would have exceeded \$2.1 million (for five years). The five year cost for 100% surveillance of all ocean dumping activities including dredged material, would be many times this figure. "The implementation of these regulations will allow nearly 100% surveillance of all ocean dumping at a cost comparable to present surveillance activity over a portion of only EPA permitted disposal operations." The notice pointed out that the ODSS would yield the incidental benefit to the vessel owner of providing use of the Loran-C receiver for general navigational purposes when not engaged in ocean dumping.

Unfortunately, after receiving public comments on the proposal, the Coast Guard, on April 30, 1981, issued a notice withdrawing the proposed rulemaking, stating that "the Coast Guard will continue to emphasize its present program of vessel and aircraft patrols, shipriders, Vessel Traffic Service (VTS) radar coverage, radio reports, and other methods of surveillance." (46 Fed. Reg. 24213-14, April 30, 1981).

Among the justifications for the withdrawal notice were comments that ODSS cost estimates may have been significantly understated, and that the need for such a surveillance system may have lessened in the face of the "December 31, 1981 phase-out of sewage sludge disposal under Pub. L. 95-153 and some industrial waste disposal under Pub. L. 96-572." The advent of the phase-out

deadlines was cited as allowing "the Coast Guard's resources now conducting surveillance of these disposal operations to be used to improve the surveillance of other disposal activities."

The irony of this statement should be at once apparent. As we all now know, the much-heralded phase-out of sewage sludge ocean dumping never occurred. Indeed, the dumping is now to be shifted to a far more distant dumping site where effective surveillance is far more problematic.

We would strongly encourage this Committee to consider legislatively directing the Coast Guard to reinstate an ODSS requirement, at least for the ten or so dumpers currently using or slated to use the 106-mile dumpsite. It is for dumping at this site that the surveillance problem (and potential drain on Coast Guard resources) is most acute, and where the costs of implementing an electronic surveillance system would be most richly recompensed in foregone Coast Guard costs and burdens.

6. Ocean Dumping User Fee

We've indicated our support for such proposals in the earlier discussion.

The Committee may wish, however, in addition to the proposed permit processing fee and the proposed special fee contemplated in the House bill, to consider establishing a non-compliance penalty mechanism to render self-executing the schedule for completing the shift from the 12-mile to the 106-mile site. For every day of continued dumping at the 12-mile site beyond the deadline specified

each dumper should be required to pay a "penalty" fee at least equal in size to the avoided costs of meeting the deadline. This would remove any economic advantage to being dilatory.

7. Liability Issues

One of the allures of the ocean as a waste disposal medium is its distance from human habitation, and the attenuated link (by way of the marine food chain) to any adverse impact on human health. Disposal practices on land have an annoying habit of coming back to haunt the waste generator, and the prospect of a large legal liability to an injured third party tends to be a very sobering one. It is all the more essential in the ocean disposal context that the prospect of eventual legal liability to affected third parties be preserved as a plausible threat.

In this context, the amendment embodied in the House bill to explicitly preserve a right of action under "Other Federal (statutory and common) law", including maritime tort actions, assumes even greater significance and argues most eloquently for support by this Committee.

8. Comprehensive Dredged Material Management Plans

My work over the past several years with the New York District of the Corps, the Marine Board of the National Academy of Sciences (and a recently-concluded Committee on National Dredging Issues), and the Office of Technology Assessment, has persuaded me that one of the most important steps that can be taken to mesh the needs of port development with the interests of environmental protection

and resource conservation is advance planning, preferably in the form of a comprehensive port-wide or Corps district-wide dredged material management plan.

Such a plan should assess ongoing navigational dredging needs, plans for new projects in the future, the volumes and contaminant status (as well as physical properties) of resultant dredged material requiring disposal, and the array of disposal and other management options available (or developable) to accommodate this material (preferably, in a way which matches the disposal method with the contamination status of the dredged material). Only in this way can ad hoc emergencies which give short shrift to one set of interests or another be avoided to the extent possible.

This Committee may well wish to consider legislatively mandating on a nationwide basis--for at least all coastal Corps of Engineer Districts--the development and implementation of dredged material management plans of this kind.

This concludes my prepared statement. The opportunity to present these views is appreciated.



NATIONAL WILDLIFE FEDERATION

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202-797-6800

August 15, 1985

The Honorable Frank R. Lautenberg
717 Hart Senate Office Building
United States Senate
Washington, D.C. 20510

Dear Senator Lautenberg:

Following the Environmental Pollution Subcommittee's July 30th hearing on ocean dumping, you sent me several questions, requesting my written response for the record. I am pleased to comply. My responses follow:

1. Do you think the EPA is doing enough to develop safe and cost-effective land-based alternatives?

Response: I think there is a considerable base of experience on safe and cost-effective land-based alternatives to the ocean dumping of sewage sludge, which has been developed around the country (and the world) with and without EPA assistance and involvement. This is demonstrated in part by the fact that fully 96 percent of all sewage sludge produced in this country is treated, disposed of, or otherwise managed by means other than ocean dumping. The Cities of Camden, NJ and Philadelphia, PA are examples of cities which, until the Fall of 1980 and the Fall of 1981, respectively, ocean-dumped their sludges, but which under EPA and public prodding were able to successfully implement land-based alternatives. (Indeed, these alternatives enable the sludges to be beneficially used in large part rather than merely discarded as unwanted, and sometimes harmful, wastes). Clearly, EPA could be doing more than it has to develop and promote the implementation of appropriate land-based alternatives for sewage sludge. However, I would be more inclined to fault EPA for not doing a better job of promoting the proven sludge management technologies and methods that already exist and have long been available. We don't so much need new and different sludge management technologies, as we need more and better utilization of the promising and proven approaches that are already in widespread use. As a final

The Hon. Frank Lautenberg
August 15, 1985
Page 2.

comment, I would note that EPA has fallen down generally in the areas of technology transfer and demonstration. For example, numerous new and innovative technologies have developed for managing hazardous wastes which await only field demonstration. EPA and the Administration are seemingly unwilling to play a constructive role in promoting and assisting the verification and commercial acceptance of new technologies. This is a generic problem not confined to sludge.

2. Would you agree that the Congress should be pushing EPA to increase its efforts to develop such alternatives?

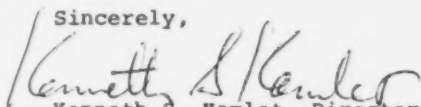
Response: Yes, but there is at least as great a need to promote the implementation of already available alternatives.

3. Why do you think the Congress should single out [the New York Bight Apex] as deserving special attention [through a Federally promoted restoration plan]?

Response: For three reasons: (a) EPA and the Congress bear some of the responsibility for the degraded condition of the Bight Apex, by allowing the causes of this pollution to continue for so long; consequently, it is appropriate that the Federal Government take some of the responsibility to correct this condition and restore the area's environmental quality; (2) the New York and New Jersey shorelines and associated coastal resources are used and enjoyed by millions of Americans; there is thus a national interest in preserving these resources which are of national significance; and (3) the rejuvenation of waterfront and coastal activities along the Bight Apex is likely to have a strong beneficial impact on both the regional and national economy, and is likewise in the public interest for this reason.

I trust these responses adequately address the questions posed. If not, or if I can be of further assistance, please don't hesitate to call upon me.

Sincerely,


Kenneth S. Kamlet, Director
and Counsel, Pollution &
Toxic Substances Division

cc: The Honorable John H. Chafee
Mr. Paul Chimes

KSK/ler

July 30, 1985

Statement of Clifton E. Curtis
on Behalf of The Oceanic Society
Before the Senate Subcommittee on Environmental Pollution
Concerning
Reauthorization of Title I of the Ocean Dumping Act

I am Clifton Curtis, the President of the Oceanic Society, a 40,000 member national non-profit environmental organization dedicated to the protection, conservation and wise use of marine and coastal resources. The Society appreciates your Subcommittee's invitation to present testimony today in relation to the reauthorization of Title I of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (the "Ocean Dumping Act").

This reauthorization hearing provides an important opportunity to examine the role of our oceans in relation to waste management, and to ensure that their "health" and vitality is not jeopardized. Though vast and covering over 70% of the earth, the oceans are a vulnerable and complex environment. Many unique and important species live in or depend upon the oceans. Too often, though, our ocean and coastal resources are mismanaged due to narrow, short range special interests, with inadequate scientific understanding of the consequences. As a result, some of our ocean and coastal areas are approaching -- and others have reached or exceeded -- the limit of abuse that can be assimilated without suffering serious, perhaps irreversible, damage.

Policies affecting the future of ocean and coastal resources must be developed with environmental consequences as the primary consideration. They must be set with appropriate respect for the linkages in the ecosystem -- linkages within and among our oceans, fresh water, land and air, and their living and non-living resources. In its broad design, the Ocean Dumping Act meets those tests. Enacted in 1972 as a result of concern over the effects of ocean dumping, the Act prohibits or strictly limits the dumping of materials harmful to humans or the marine environment.

With the benefit of better information and regulatory experience under the existing Act, however, the Oceanic Society believes that additional substantive amendments are now needed. The amendments contained in S. 824, as introduced by Senators Lautenberg and Bradley, in combination with several other amendments (most of which are in the companion House bill -- H.R. 1957), would provide a much sounder statutory framework as we move forward into the late 1980s and 1990s.

We recognize that the Administration does not support substantive amendments to the Act, other than providing EPA's Administrator the discretion to adopt a use fee system for recovering program costs of ocean disposal. However, the Oceanic Society believes that there are several amendments that will (1) assist EPA and the Corps of Engineers in carrying out their responsibilities under the Act, (2) provide public authorities,

industry, other interested parties and the public with a better understanding of their rights and responsibilities, and (3) enhance the prospects for protection and wise use of our ocean and coastal resources.

In May, 1984, EPA issued a public notice announcing its tentative decision to discontinue use of the 12-mile sewage sludge dump site in the New York Bight Apex. We mention this notice because its introductory paragraphs contain EPA's most recent articulation of the agency's approach to ocean dumping -- an approach which is consistent with, and would benefit from, statutory amendments such as those proposed in S. 824 and H.R. 1957. As stated in that notice (49 Fed. Reg. 19042, May 4, 1984):

Generally, on all future permit decisions, EPA's approach to ocean dumping may be summarized as follow

(1) The Agency will, as an overall principle, protect the oceans from significant adverse effects of waste disposal. We will particularly assure that they are not used for "cheap" waste disposal as a matter of short run economic considerations alone;

(2) In any specific case, the Agency will allow ocean disposal of a waste only if the applicant can show that no practicable alternatives are available that have less impact on the total environment. EPA will apply a rule of reason in determining practicability; and

(3) For the long run, the Agency will actively encourage environmentally beneficial approaches such as waste minimization, recycling or reuse.

I would like to comment on each of those three bases for EPA's approach to ocean dumping, as the principal focus of my testimony, because they serve to illustrate the need for amendments to the Ocean Dumping Act.

With respect to the first basis, while the EPA statement in part mirrors existing language in the Act, its concern over "cheap" waste disposal deserves special attention. Marketplace forces, standing alone, invariably lead to the selection of ocean dumping as the least costly disposal option. Several of the proposed amendments -- such as the added criteria for permits and site designations, writs of mandamus or judicial "orders" to compel compliance with the requirements of Sec. 102(c), the "harmful" municipal sludge definition, and the clarification regarding adherence to the London Dumping Convention (LDC) -- will increase the likelihood that protection of the oceans will remain the paramount consideration. Inclusion of an additional permit condition that addresses applicant integrity similarly would further that objective. Albeit after the fact with respect to municipal sludge dumping at the 12-mile site, the proposed "New York Bight Apex, Hudson-Raritan Estuary Restoration Plan" (S. 824, Section 113(c)) reflects appropriate concern for the rehabilitation of degraded marine and coastal areas.

The proposed language regarding application fees, special processing fees, and the so-called Studts' savings clause, also will help redress the marketplace imbalance, as would an amendment addressing the need for financial responsibility, liability and compensation sufficient to ensure that cleanup and all legitimate damage claims are compensated if a harmful incident occurred in relation to a dumping operation. Conversely, sub-

sides to offset the incremental costs of moving sludge to deep ocean dump sites would only exacerbate the imbalance.

With respect to EPA's second basis, several of the proposed amendments address the need for a showing that "no practicable alternatives are available that have less impact on the total environment". In addition to their attraction as a "cheap" disposal option, for some the oceans continue to be the "out of sight, out of mind" solution to the problem. As additional constraints are placed on other options -- such as those contained in the recent RCRA amendments -- we need to be especially careful that the oceans not be viewed as the easy out. If disposal is necessary, the oceans certainly should be examined as one option. As stated earlier, though, the oceans are a vulnerable and complex environment. While scientific knowledge of the marine environment has advanced substantially in recent years, there still are important questions that need to be answered as we seek to understand the critical role that the oceans play in our life cycle.

Viewing the oceans as the "last resort" is the only way to ensure that we exercise the necessary caution and restraint in considering that disposal option. In one sense, statutory references to that concept would be redundant, since Annex III of the London Dumping Convention requires permit applicants to take into account "[t]he practical availability of alternative land-based methods of treatment, disposal or elimination, or of

treatment to render the matter less harmful for dumping at sea." (para. C.4). Having ratified that treaty, it is our view that the United States is obligated to adhere to that requirement, as well as its other provisions.

However, past experience involving the Corps of Engineers' efforts to except themselves from that requirement and certain other provisions of the LDC have necessitated inclusion of an amendment in H.R. 1957 (Section 1416(g)) clarifying treaty adherence. As stated in the Committee Report accompanying the House Merchant Marine and Fisheries Committee's passage of that bill, "the major effect of this new [treaty adherence] amendment is to make clear that all actions of EPA and the Corps pursuant to the Act must comply with our international obligations under the LDC." (at 19).¹ That proposed amendment, as well as the Apex/Estuary-related amendments that focus on a comprehensive assessment (S. 824, Sec. 113(d)) and quality standards (H.R. 1957, Section 1414A(e)), and the broader permit requirements pertinent to municipal sludge disposal (H.R. 1957, Section 1412(a)(3)) will aid regulatory officials in their efforts to protect the marine environment. Such language also will be

¹ On a broader level, it is disturbing that the Corps of Engineers continues to press for special treatment under the Ocean Dumping Act beyond that already afforded. As one example, while the Oceanic Society may not agree with the thrust of EPA's proposed "quick fix" ocean dumping regulations that currently are awaiting OMB approval, efforts by the Corps to carve out special consideration prior to OMB clearance undermines the objective of uniform application of the Act's framework provisions.

helpful in applying a "rule of reason" test in determining the practicability of other alternatives.

With respect to its third basis for considering ocean dumping permits, the Oceanic Society strongly endorses EPA's intention to "actively encourage environmentally beneficial approaches such as waste minimization, recycling or reuse." A "hierarchical" approach to waste management, within which ocean dumping is viewed as the bottom tier approach, is absolutely essential.² Every effort should be made to utilize waste management options that are higher in that hierarchy. When a preferred approach -- such as source reduction, recycling or treatment -- cannot be fully utilized, partial utilization and concerted efforts to advance fuller utilization should be pursued vigorously.

Regrettably, real progress towards this objective too often suffers the same fate as do other "motherhood and apple pie" statements. No one disputes the need for an effective hierarchical approach to waste management, but effective implementation is a difficult task that is hindered in part by crisis-response, short term-focused demands on decision makers. Leaving aside the need for more attention and action with respect to the upper tiers of the hierarchy, the bottom rung "disposal"

² See, e.g., Technologies and Management Strategies for Hazardous Waste Control, Office of Technology Assessment, U.S. Congress, Washington, D.C., OTA-M-196 (1983), at 29-30; and Workshop Summary, Educational Workshop on Ocean Incineration, The Keystone Center, Washington, D.C., June 27-28, 1985, at 3-4.

option has its own special problems as we seek the best solutions. While it may well be appropriate, for example, for RCRA to severely limit land disposal options for hazardous waste management, it indirectly increases consideration of the ocean option. Have we merely shifted the problem to another precious resource?

For some, the ocean's attractiveness is deceptively conveyed in that melodious phrase, "the solution to pollution is dilution." For certain non-persistent wastes, the oceans may be the preferred option. However, under a hierarchical approach, there would be a premium on ensuring that persistent toxic constituents are kept out of the environment entirely, or that they are isolated in controlled environments until they can be destroyed or neutralized. Under RCRA's "hazardous waste" definition and criteria, for example, limitations on ocean disposal similar to those for land disposal might be equally appropriate.

For these reasons, the Oceanic Society supports amendments such as the additional permit condition criteria proposed in Section 104(a)(5) and the amendments mentioned earlier in relation to consideration of land-based alternatives. Implementation of an effective hierarchical waste management strategy is not easy, but statutory provisions such as those will advance that objective.

Mr. Chairman, in the context of EPA's statement on the three bases underlying its approach to ocean dumping, I have expressed

the Society's views on a number of amendments that are needed to refine and improve the Ocean Dumping Act. Those amendments, among others that we support, are set forth in detail as an appendix to this testimony. We believe that S. 824 contains important revisions that merit enactment into law. Several amendments included in H.R. 1957, along with a few other changes we are proposing, also merit the support of this Subcommittee, your full Committee and the entire Senate.

I would be glad to answer any questions that you or other Members of the Subcommittee have in relation to the Oceanic Society's testimony, including the appended list of amendments that we support. We look forward to working with you in your efforts to reauthorize Title I of the Ocean Dumping Act with adequate funds and in a manner that ensures the protection, conservation and wise use of our ocean and coastal resources. Thank you.

July 30, 1985

APPENDIXAmendments to Title I of the Ocean Dumping Act
Which The Oceanic Society Supports¹Dumping Permit Program -- Sec. 1412

(1) amend Sec. 1412(a) as proposed in S. 824, which contains restrictions on permit issuances, with the modifications as proposed in H.R. 1957 (MMF Comm.), which contains the additional reference to "wetlands" in Sec. 1412(a)(1)(C), requirements for consideration of land-based alternatives in Sec. 1412(a)(3)(B), and the technical change regarding the reference to radioactive wastes

(2)* amend Sec. 1412(a)(1)'s introductory paragraph reference to permits issued "after notice and opportunity for public hearings," by modifying that phrase to read "after notice and opportunity for public hearings that shall be on the record,"²

(3)* amend Sec. 1412(a)(1)'s concluding paragraph by adding a sentence therein which references the need for best available technologies, such as³:

The Administrator shall require in all activities under new permits, and wherever practicable in activities under existing permits, the use of best available technologies for the protection of safety, health and the environment wherever such activities would have a significant effect on safety, health or the environment, except where the Administrator determines that

¹ References to those amendments contained in H.R. 1957 as reported out by the House Committee on Merchant Marine and Fisheries, and those reported out by the House Committee on Public Works and Transportation, are noted by use of the phrases "MMF Comm." and "PW Comm.", respectively. Amendments being proposed by the Oceanic Society that are not contained in either S. 824 or H.R. 1957 are asterisked next to the paragraph number (e.g., "(2)*").

² As support for this amendment, see: Joint Comments of Environmental and Other Citizen Organizations in Response to the U.S. Environmental Protection Agency's Draft Regulations on Ocean Incineration, prepared by the Oceanic Society, June 28, 1985, at 42-43.

³ Id., at 62. The suggested language tracks that contained in the Deep Seabed Hard Mineral Resources Act of 1980, Pub. L. 96-283, Title I, Sec. 109(b).

the incremental benefits are clearly insufficient to justify the incremental costs of using such technologies.

(4)* amend Sec. 1412(a)(1) by adding two additional permit application criteria: (1) applicant integrity⁴; and (2) a showing of financial responsibility, liability and compensation coverage sufficient to ensure that clean up and all legitimate damage claims are compensated if a harmful incident occurs in relation to a dumping operation⁵

(5) amend Sec. 1412(c) as proposed in S. 824, which contains more detailed criteria pertinent to sites and times for dumping

(6)* amend Sec. 1412(c)(1)(D) as proposed in S.824, with a further modification that adds the words "and cumulative" after the existing word "persistent"

(7)* amend Sec. 1412(c)(2)(A) as proposed in S.824, with a further modification to strengthen the monitoring requirements, i.e., ⁶:

The Administrator shall periodically monitor, or cause to be monitored, the effects of the dumping of materials at or adjacent to each site, on the basis of the characteristics of the site and the materials to be dumped, that is necessary to accomplish the purposes of this subchapter; and

(8) amend Sec. 1412 by adding a new subparagraph (f), as proposed in H.R. 1957 (MMF Comm.), which prohibits the use of authorized funds to offset the incremental or any other costs of dumping of material or the transport of material for dumping

(9)* amend Sec. 1413(a) to incorporate the matters addressed in paragraphs (2) and (3), above; conversely, the amendments to H.R. 1957 that provide special treatment of the Corps' activities (i.e., PW Comm., Amendments #4 and #6) should not be adopted

⁴ Id., at 50-57.

⁵ Id., at 43-46. With respect to the latter amendment, that would allow for special coverage with respect to such activities as ocean incineration that would go beyond the basic requirements of CERCLA, especially for damages.

⁶ As support for this amendment, see, e.g., Clean Water Act, Pub. L. 95-217, 33 U.S.C. Sec. 1341(d).

Permit Conditions -- Sec. 1414

(10) amend Sec. 1414(a) as proposed in S. 824, which contains additional permit conditions related to a hierarchical waste management strategy

(11) amend Sec. 1414(b) as proposed in H.R. 1957 (MMF Comm.), to provide for application fees, special fees, and the use of funds from those fees

(12) amend Sec. 1414(e) as proposed in S. 824, which requires that "quality assurance" programs be established and maintained, as modified by the additional language proposed in H.R. 1957 (MMF Comm.) that requires annual reports on the implementation of those programs

(13) amend Sec. 1414 as proposed in S. 824 by adding a new subsection (j) at the end thereof that addresses other reporting requirements

Transitional Provisions

(14) amend the Act as proposed in S. 824 (Sec. 4) to provide a "grandfather" provision that allows continued use of certain sites until site designation procedures are completed

Definitions

(15) amend Sec. 1402 as proposed in S. 824 by including the revised references to "municipal sludge", along with the additional modifications proposed in H.R. 1957 (MMF Comm.) with respect to the definitions of "ocean waters", "monitoring", and the "EEZ", and the deletion of the reference to the Canal Zone in the definition of the "United States"

Penalties

(16)* amend Sec. 1415(b) as proposed in S. 824 in relation to criminal penalties, as modified by stronger penalties (e.g, felony crime and lengthier imprisonment) that would be consistent with comparable provisions proposed for the Clean Water Act

(17) amend Sec. 1415(g)(5) as proposed in H.R. 1957 (MMF Comm., as modified by PW Comm., Amendment #2) to provide for judicial "orders" in relation to site designations for sites where dumping currently is authorized

Schedule for Completion

(18) amend the Act as proposed in S. 824 (Sec. 7), in order to establish a schedule for expeditiously completing the study and designation of all areas of ocean waters approved before July 1, 1982 for dumping on an interim basis

New York Bight Apex

(19) amend the Act by adding a new section as proposed in S. 824 (Sec. 113), including its broader references to "Estuary" in the "Restoration Plan" and the more detailed consultation mechanism described in Sec. 113(c)(1), as modified by the "quality standards" provisions (and one-year reporting time frame) and the fiscal year fund authorization references contained in H.R. 1957 (MMF Comm.)

Authorization of Appropriations

(20) amend Sec. 1420 as proposed in H.R. 1957 (MMF Comm.)

Convention Adherence

(21) amend Sec. 1416 as proposed in H.R. 1957 (MMF Comm.) by adding a new subsection (g) which makes it clear that all the actions of EPA and the Corps pursuant to the Act must comply with our international obligations under the London Dumping Convention

Relationship to Other Laws

(22) amend Sec. 1416 as proposed in H.R. 1957 (MMF Comm.) by adding a new subsection (h) -- a "savings clause" -- concerning the rights or liabilities of persons under other federal law

Annual Report to Congress

(23) amend Sec. 1421 as proposed in H.R. 1957 (MMF Comm.) to require annual reports to Congress by the Administrator and the Secretary on the administration of Title I

Dumping of Sewage Sludge and Industrial Waste

(24) amend Sec. 1412a(a) as proposed in H.R. 1957 (MMF Comm.) in relation to harmful municipal sludge dumping

(25) amend Sec. 1412a(d) as proposed in H.R. 1957 (MMF Comm.) to include the definition of "harmful municipal sludge"

EEZ References

(26) amend Sec. 1401 and Sec. 1411 as proposed in H.R. 1957 (MMF Comm.) to mention explicitly the extension of U.S. authority in our Exclusive Economic Zone⁷

⁷ In relation to this amendment, the report on the bill should reference the fact that appropriate U.S. officials should bring this change to the attention of the parties to the London Dumping Convention, given our responsibilities under Article XIII of that treaty.



THE OCEANIC SOCIETY

EDUCATION • RESEARCH • CONSERVATION

OCEAN POLICY OFFICES
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September 3, 1985

The Honorable Frank R. Lautenberg
United States Senate
Hart Senate Office Building -- Suite 717
Washington, D.C. 20510

Re: Senate Environment and Public Works Committee's
July 30, 1985 Hearing on the Ocean Dumping Act

Dear Senator Lautenberg:

By letter dated August 5, 1985, you requested responses to two questions related to the Senate Environment and Public Works Committee's July 30, 1985 hearing on the reauthorization of Title I of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (the "Ocean Dumping Act"). This letter provides my responses to your questions.

Question #1: Is it fair to say that you believe my bill is consistent with EPA's ocean dumping policies?

Response: Yes. As mentioned in my prepared testimony for the July 30th hearing (at 3), EPA's current ocean dumping policies -- as stated in 1984 (49 Fed. Reg. 19042, May 4, 1984) -- are consistent with, and would benefit from, statutory amendments such as those proposed in S. 824. With the benefit of better information and regulatory experience gained during the thirteen (13) years since the underlying statutory authority was enacted into law, S. 824 contains needed amendments that appropriately carry forward the basic findings and purposes of the Act. The provisions of your bill provide a much more current and sound statutory framework to guide EPA and other Federal agency officials in carrying out its policies in a manner that is responsive to the needs of the late 1980s and 1990s. The existing EPA policies can be refined and advanced, based on a clearer understanding of those issues that merit increased attention.

As also stated in my prepared testimony, there are several other amendments that are needed; those amendments similarly are consistent with EPA's current policies, while accomplishing the same beneficial purposes as those contained in S. 824.

Question #2: I am particularly interested in your views about the restoration plan and study of land based alternatives. How are these two provisions consistent with EPA's policies?

Response: As indicated by your question, amendments contained in S. 824 provide for preparation of a "New York Bight Apex, Hudson-Raritan Estuary Restoration Plan" (Sec. 113(c)(1)), as well as a schedule for carrying out that plan, and for a "comprehensive assessment of land-based disposal options for municipal sludge" (Sec. 113(d)). Those provisions are extremely consistent with EPA's current policies. They provide invaluable instructions and guidance for EPA officials and others that further the objectives of those policies.

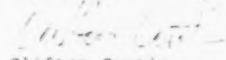
In my prepared testimony, I quoted and commented on EPA's three bases for its current policies with respect to ocean dumping. Summarily stated, they are: protecting the marine environment; treating the oceans as the disposal option of "last resort"; and promoting hierarchical waste management strategies. Both of the amendments you mentioned are consistent with, and supportive of, those three bases.

The components of the restoration plan will increase significantly our knowledge and understanding of marine and coastal ecosystems that are under stress; its implementation will help to restore those degraded systems; and the plan's development and implementation will generate information that will aid decision makers in assessing ocean disposal, land disposal and other more preferred waste management strategies. The land-based alternatives study similarly will increase our knowledge and understanding of disposal options that could accommodate wastes more effectively -- enhancing prospects for marine environmental protection, expanding the range of potential land-based disposal strategies, and providing opportunities to advance hierarchical approaches.

* * * *

I hope that these responses address adequately the concerns raised by your questions. The Oceanic Society appreciates greatly the leadership role that you have taken in relation to ocean dumping issues that are of concern to Congress, Federal agencies, States, industry, the environmental community and the public-at-large, among others. Your introduction of S. 824, your active participation in the July 30th hearing, and the interest and concern that you and your staff have shown in other ways has contributed significantly to enlightened public debate, and to the prospect that the Ocean Dumping Act will be reauthorized with those amendments necessary to carry out EPA's policies in an effective manner.

Sincerely,


Clifton Curtis
President

cc: The Honorable John H. Chafee



clean ocean action

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Statement of D. W. Bennett, chairman,
Clean Ocean Action Steering Committee,
before Senate Sub-Committee on Environmental
Pollution on Amendments to the Ocean Dumping
Act, July 30, 1985.

My name is D. W. Bennett. I am chairman of the steering committee of Clean Ocean Action, a coalition of fishing, environmental, business, and service organizations, located mostly in New Jersey. The 50 member organizations, representing more than 100,000 individuals, are listed on the back of this testimony.

I want my remarks today to reflect the interests of the commercial fishermen who are members of Clean Ocean Action and have a particular interest in a healthy ocean environment where they make their living. This testimony comes from conversations with working fishermen from the fishing cooperatives at Belford in Monmouth County and Point Pleasant in Ocean County. The fishermen themselves, are out today fishing, some dragging in the area near the Mud Hole, others on joint ventures, squid fishing.

Under current ocean dumping practices, these fishermen are losing their traditional fishing grounds nearshore. The waters are polluted; nets dragged near the 12-mile sludge dumpsite come back on deck so clogged with human hair that the nets won't fish. Fish at and near the dumpsite show higher than usual incidences of disease. Fishermen must go farther offshore in bad weather to make a living. Because of the precariousness of their situation, they find it difficult to get loans for new boats; their insurance rates are soaring.

Many of their problems can be traced to the unsatisfactory open ocean dumping techniques presently practiced in the New York Bight. On behalf of the commercial fishing members of Clean Ocean Action, I appear today to pass on to you their support of S.824 to reauthorize and amend the Ocean Dumping Act.

In particular, we support the closure by law of the 12-mile site within 18 months, and we support with enthusiasm the New York Bight Apex, Hudson-Raritan Estuary Restoration Plan. The Bight/Estuary waters need help, and they deserve it, being the neighboring waters for the recreational and commercial interests of tens of millions of people.

We have a number of specific suggestions and comments about S824.

(1) We especially commend the inclusion of paragraphs (5) and (6) under Section 3. Permit Conditions. These paragraphs stress a comprehensive approach to waste management and provide monitoring of dumping.

(2) We disagree with the inclusion of lines 10-17, page 2, under Section 2, Dumping Permit Program (a) (1) which would permit ocean dumping of pretreated sludge. Pretreated ("good") sludge should be used on land.

(3) We ¹⁴⁵⁷urge inclusion in this Senate bill of a user fee schedule along the lines of HR4364. A user fee will impress upon the dumpers the fact that all disposal at sea has a cost to the public of environmental damage. A user fee will provide an incentive for ocean dumpers to look for land-based alternatives. A user fee can help pay for the costs of monitoring and the Restoration Plan. Why not put the burden of these costs on the users of the ocean?

(4) We urge the inclusion of language in this Senate version to allow parties to sue for damages caused by ocean dumping. This is of particular interest to commercial fishermen; New Jersey sea clammers lost a court case when their rights to sue for such damages were thrown out.

I said at the beginning that my testimony reflected the special concerns of commercial fishermen. A year ago Eric Thielman, who fishes out of Point Pleasant, appeared before the House Subcommittee on Oceanography to talk about HR4364. I have attached a copy of his testimony to mine because it is right from the source. I would like to quote one paragraph from Mr. Thielman's testimony in conclusion:

One of the problems that we encounter as a result of the sludge dumping is the slime that forms. In recent years, this slime has become extremely thick within what had been some of our best fishing grounds and is moving southeasterly covering more and more of those grounds. I found traces of this slime in our nets as far as seventy miles offshore recently. This slime, which we once had analyzed as a combination of the natural mud bottom, human hair, fibers from sanitary napkins and varieties of treated sewerage, has a remarkable ability to entwine within our nets, often heavily enough to reduce their working efficiency, sometimes up to 100%. Occasionally, this slime build-up is sufficient to tear our nets apart or to cause total loss of a net. The result is a loss of production, many extra man hours spent cleaning and repairing existing nets or building new nets, expenses of replacement material and generally increased aggravation in what is already a difficult occupation. We only make money when we are catching fish.

Is it any wonder commercial fishermen support S. 824?

CLEAN OCEAN ACTION

PARTICIPATING ORGANIZATIONS

AAUW, Inner Branch Council	Marine Mammal Stranding Center
American Littoral Society	Marine Underwriters, Inc.
Asbury Park Fishing Club	Middlesex County Board of Realtors
Belford Seafood Coop	Monmouth County Board of Realtors
Central Jersey Anglers	Monmouth Council of Girl Scouts
Central Jersey Natural Foods Club	Monmouth County Friends of Clearwater
Citizens Conservation Council, Ocean Co.	National Coalition for Marine Conservation
Clean Water Action	National Council of Jewish Women of Red Bank
Concerned Citizens of Clean Ocean Action	National Resources Protective Assn.
Common Shores	N.J. Council of Diving Clubs
C.W.A. Local 1034	N.J. Eastern Surfing Assn., Northern Dist.
Eastern Dive Boat Association	New Jersey Sierra Club
Environmental Defense Fund	Ocean City Environmental Association
Garden State Seafood, Inc.	Ocean County Citizens for Clean Water
Greenpeace, USA	Ocean County Board of Realtors
Hudson River Sloop Clearwater, Inc.	Point Pleasant Fishing Coop
I.U.E. Local 417	Red Bank Women's Club
Jersey Coast Anglers	Riverside Drive Association
Jersey Coast Shark Anglers	Rumson Garden Club
Jersey Shore Audubon Society	Saltwater Sportsmen Club
Junior League of Monmouth Co., Inc.	South Monmouth Board of Realtors
League of Conservation Voters	Summit-New Prov-Berkley Hts- Board of Realtors
League of Women Voters of Monmouth Co.	Staten Island Sport Divers
Main One Marina	United Boatmen of New Jersey & New York
Marine Environmental Council of Long Is.	Village Women's Club

Statement of Eric Thieleman
on behalf of Clean Ocean Action before
Subcommittee on Oceanography hearing on
Congressman Hughes Bill # H.R. 4364

I make my living as a commercial fisherman aboard a bottom trawling vessel within a fleet of boats and men that have traditionally been able to earn their living fishing, seven or more months of each year, within the general area of the current dumpsite. Things are changing.

I would like to tell you what we see, as fishermen who work this area many days of the year and how we feel the dumping is affecting the fish and our livelihood.

We are pleased to see that action is being taken to move this dumpsite with the possibility of restoration work. We appreciate your interest and efforts.

The current dumpsite is at the beginning of an underwater valley which gradually runs out to the continental shelf. This area, known as the Mud Hole, is close enough to shore so as to allow boats from several ports to reach the fishing grounds by sunrise, catch what they can, return to the dock, and unload usually by late afternoon. It hosts a variety of species of fish, particularly whitting, which has been the mainstay of our fleet. Some men have earned their living there for as long as forty years.

One of the problems that we encounter as a result of the sludge dumping is the slime that forms. In recent years, this slime has become extremely thick within what had been

some of our best fishing grounds and is moving southeasterly covering more and more of those grounds. I found traces of this slime in our nets as far as seventy miles offshore recently. This slime, which we once had analyzed as a combination of the natural mud bottom, human hair, fibers from sanitary napkins and varieties of treated sewerage, has a remarkable ability to entwine within our nets, often heavily enough to reduce their working efficiency, sometimes up to 100%. Occasionally, this slime build-up is sufficient to tear our nets apart or to cause total loss of a net. The result is a loss of production, many extra man hours spent cleaning and repairing existing nets or building new nets, expenses of replacement material and generally increased aggravation in what is already a difficult occupation. We only make money when we are catching fish.

More important to us, however, are what seems to be the behavior patterns of large schools of fish, primarily whitting, on which we make our living. As we noticed the increased build-up and spreading of sludge deposits, particularly over the last four years, we also became aware of an increasingly sour odor from the slime entwined in our nets. At the same time, the large bodies of fish each year arrive a few weeks later and stay for shorter periods of time. This year the main body of fish never arrived. They seem to stay or return more quickly to the offshore fishing grounds, causing boats and crew to steam as long as twelve hours just to reach the fishing grounds. Instead of landing catches five days a week, now the average is

two. Aside from the increased hazards of venturing offshore in the winter time, we have an increase in fuel expenses, more wear and tear on boats and crew, reduced production requiring less dock help and increased costs to consumers. Some smaller boats and their crews have lost up to two months of pay because they cannot handle offshore trips in the winter.

We have seen several species of fish once abundant in the dumping area virtually disappear, rarely again to be found within twenty miles. We are seriously concerned that the same thing is happening to whitting, causing serious doubts as to our future in this industry. At our dock alone, annual fish production has dropped from better than 10 million pounds caught in '78 and '79 by 10 boats to just over 6 million pounds in 1983 with 3 additional boats working. We believe sludge is a serious contributing factor.

As an industry we are pleased with your proposal to move the site offshore but we honestly feel that 3 years of continued dumping may be more than the area can handle. We ask that you seriously consider moving as much of the sludge dumping as possible offshore by the end of 1984.

I'd like to thank you for taking the time to hear our views on this problem. We appreciate your efforts at a viable solution to a very serious problem.



clean ocean action

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(201) 741-1526

August 16, 1985

The Honorable Frank R. Lautenberg
United States Senate
Committee on Environment and Public Works
Washington, D.C. 20510

Dear Senator Lautenberg:

Here are answers to the questions you posed to me in your letter of August 5 with regard to the July 30 hearing on the Ocean Dumping Act:

- 1A. I do not think EPA is doing enough to develop land based alternatives for sewage sludge disposal/use, but I'm not sure all the blame should rest with EPA--states are not aggressive either.
- 1B. Yes, EPA should be pushed to increase its effort to develop such alternatives. As long as ocean dumping is attractive--because of the ease of permit granting and the low cost--no dumper has incentive to look for land based alternatives. EPA can stress those alternatives.
- 2A. The Bight Apex needs special attention because it is a special place, in two ways:
 - 1. It receives the direct and indirect discharges of some 15 million people, plus the runoff from heavily urbanized watershed of metropolitan NY/NJ and its heavy industry, plus the dumping of some 20 million tons of dredge spoil and sewer sludge annually. No other nearshore body of water receives this loading.
 - 2. The Bight Apex serves the recreational and commercial needs of great numbers of people, from a family renting a boat to go fishing to large commercial trawlers, from swimmers on the beaches of Long Island and New Jersey to the container ports of the inner harbor.

The Apex has special problems and special needs. It deserves special attention.

Thank you for the opportunity to add these comments. Good luck with the Ocean Dumping Act.

Sincerely,

D. W. Bennett
Chairman

cc: Cindy Zipf

TESTIMONY OF JOSEPH T. MCGOUGH, JR., COMMISSIONER
of the
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
before the
ENVIRONMENTAL POLLUTION SUBCOMMITTEE
of the
COMMITTEE ON THE ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

July 30, 1985

Good afternoon, Chairman Chafee, and members of the Environmental Pollution Subcommittee. My name is Joseph McGough. I am Commissioner of the New York City Department of Environmental Protection. I am pleased to appear before you today to report on New York's progress in effecting the move to the 106-mile ocean disposal site, and to comment for the record on the legislation under consideration, the Ocean Revitalization Act of 1985 (S. 824).

On April 1st, the United States Environmental Protection Agency announced its final determination to deny all petitions, including our own, to redesignate the 12-mile Sewage Sludge Dump Site in the New York Bight Apex. Although we opposed the move from the 12-mile site to the deep-water site in the past, the city is now giving its full cooperation to EPA in achieving a rapid and orderly transfer from one site to the other. On July 9th, EPA announced its approval of a schedule for shifting New York City's sludge disposal operations from the current sludge disposal site 12 miles off shore to the deep-water municipal sludge disposal site 106 miles off shore. The schedule was negotiated between EPA and the city over the last several months.

New York City actually began working on the move to the 106-mile site in April, 1984, when EPA announced its tentative denial of the redesignation of the 12-mile site. We developed a request for proposals (RFP) to design, implement and run the 106-mile operation, for which we received thirty-two inquiries, resulting in nine proposals. Three proposals were eliminated because they were substantially non-responsive to RFP criteria. The remaining six were subjected to a comprehensive evaluation process, by which we determined that the medium size barge operations (as contrasted with those which used some sort of "mother" vessel) were best suited to our needs.

This choice clearly offered more reliability and flexibility for the following reasons:

- The ability to dock this type of vessel at most of the water pollution control plant docks.
- No additional docking facilities would have to be built or acquired.
- Because of the replaceable power source(tugs) most of the maintenance costs are eliminated.
- These barges can easily be used for excess storage in time of inclement weather and then be hauled directly to sea when weather conditions improve.
- If ocean disposal were to be discontinued after the five year designated period, these barges could more readily be incorporated in a land based alternative, whereas a "mother" vessel would have no use.

- Although cost was only a minor factor in the evaluation process (only 10 points out of a possible 100), medium-sized barges were also less costly.

Having selected our preferred method of operation, we estimated that it would take thirty-eight months to contract for the design, construction and operation of these barges as proposed. While the proposals themselves indicated a shorter completion time, all of the proposers had neglected to include contract negotiation and approval time: New York City's contracting process includes legally mandated checks and balances by the agencies that have oversight on these issues.

EPA rejected this thirty-eight month schedule. Since our administrative time is composed of legally mandated procedures not subject to negotiation, we concluded that the only way to shorten the schedule was to take a more active role in the development of performance specifications which would then be used in requesting bids for the design and construction of the barges. Our original idea to contract out the entire operation was in this way broken down, so that we would be in control of the design and construction aspects, in order to speed up the process, after which the running of the actual disposal operation would be contracted out. With this change, we arrived at a thirty month schedule which was approved by EPA. We are currently in the fourth month of this thirty month schedule.

We are confident that this schedule achieves an optimum balance between the twin goals of moving to the 106-mile site both as quickly as practicable and as efficiently as possible. As this move farther out to sea is a new undertaking for us, we have had to gather information and experience even as we set about defining the contours of a safe and reliable operation. Our schedule insures that the move will indeed be expedited, and without a concomitant sacrifice of prudence.

That concludes my progress report. I will now address the legislation under consideration, S. 824.

Our greatest concern regarding S. 824 is with respect to two provisions which raise an important question about the manner in which decisions involving the environment are to be made. Section eight of the bill contains a declaration that the New York Bight Apex is not a suitable location for the ocean dumping of municipal sludge, and a companion provision prohibiting the issuance of any permits authorizing disposal in the Apex after eighteen months from the date of enactment. We strongly believe that decisions such as these should be based on scientific evaluation conducted by the EPA, the agency which has been specifically charged with responsibility for environmental matters.

With respect to the 12-mile site, EPA has already announced its determination to close that site. While New York City disagrees with the merits of this decision based on its own assessment of the scientific data, we are nonetheless confident

that the decision was made responsibly, and that it represents EPA's best judgment regarding a body of highly specialized data. Since EPA has made this announcement, the utility of a legislative determination and ban on use of the site is unclear. More importantly, we feel that Congress, rather than politicizing sensitive environmental siting decisions should do what it can to ensure that such decisions are made through the most rational and unbiased process possible. In the past, Congress has done this by establishing generally applicable, rather than site-specific requirements in the Ocean Dumping Act and all the other major environmental statutes. These general criteria are then applied to specific situations through an administrative rather than legislative process. Passage of S. 824 would set a precedent in this regard, and we think a negative one.

The companion provision, the eighteen month deadline for completing the move from the 12-mile site, is in direct conflict with EPA's announced judgment on the question of the timing of the move. We think that legislating such a deadline is unwise; it arbitrarily ignores the technical requirements essential to establishing an efficient, reliable, and safe operation. It is to those technical considerations that EPA's administrative expertise and discretion are intended to be applied. It is not sensible to cripple this process by an advance, a priori legislative determination. We believe that the success of our negotiations with EPA demonstrates again the strength and value of the administrative process for decision-making. Our progress argues forcefully against legislative intervention which would

short-circuit this process. With EPA, we have developed an implementation schedule which is environmentally and operationally sound. Passage of S. 824 would intrude upon the administrative process now underway. In the matter of the designation of the 106-mile site, Congress exercised oversight, but legislative restraint, and allowed the system to work; the system accomplished the designation through a reasonable, defensible process. We strongly recommend that Congress once again exercise oversight but restraint, and eliminate those specific scheduling deadlines included in section eight of S. 824.

We are also concerned about a provision in section two of the bill which might undermine the balancing analysis currently required under section 102(a). That analysis evaluates ocean and land-based alternatives for the disposal of sludge by application of a set of criteria to each option. The disposal issue cannot reasonably be addressed if such a comparative analysis is not undertaken. It is not productive to talk about the risks involved in any method of disposal in absolute terms. All factors should be considered, with judgments and choices predicated on an assessment of relative risks. Accordingly, in section two of S. 824, in the amendment to section 102(c)(3), the EPA Administrator should be directed to apply section 102(a) criteria in making any determination that a site is no longer suitable for dumping, in order to preserve the comparative assessment. As this bill is now written, a site designation

would continue to require a 102(a) analysis; by the same terms, any decision to terminate such a designation should be made on the same basis.

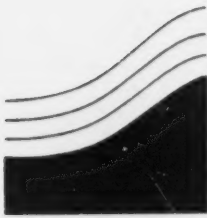
Section two also contains a prohibition against the issuance of any dumping permit to any sludge-generating entity unless that entity is in compliance with all regulations promulgated pursuant to sections 307(b) and 402(b)(8) of the Clean Water Act (relating to requirements for an effective and comprehensive pretreatment program). EPA has produced a comprehensive set of regulations, covering both administrative and operational aspects of pretreatment programs. We think it appropriate and desirable that such entities be required to comply with those provisions which have an effect on sludge quality. We recommend that this subcommittee consider an amendment like that reported out by the House Public Works Committee which would so limit the compliance requirement, to those regulations which have an effect on sludge quality.

Finally, I would like to express our support for the development of a Bight Restoration Plan mandated by section eight of the bill. The studies which we have conducted indicate that there will be no significant improvement to the 12-mile site if sewage sludge is moved to the 106-mile site. Accordingly, a Bight Restoration Plan is still very much needed if conditions are to improve after a new disposal location is used. Since the debate on the issue of whether sewage sludge is a substantial cause of the pollution in the Bight has been rendered moot by the EPA's decision, efforts can now be focused on controlling those

sources which remain. And as the sources which remain are the sources which have a much more important effect on Bight conditions, a restoration plan targeted at controlling these sources is very promising.

New York City's own water pollution control program continues to move forward. The North River Plant is expected to be on-line in December, 1985, six months ahead of the consent decree schedule, and the Red Hook Plant is scheduled to be on-line by May, 1987. With the addition of these plants, N.Y.C. will have finished all plants necessary to treat 100% of our dry weather flow. To address the problem of combined sewer overflow, we have initiated several projects. In addition to our demonstration project in Brooklyn utilizing the Swedish flow balance method, and our CSO facility at Spring Creek in Queens, we have embarked upon a comprehensive program to address the problem throughout the city. We have also begun to develop a Water Quality Facility Plan for Flushing Bay in Queens. While we are committed to continuing our contribution to water quality control efforts, we have noted, for example, that the Clean Water Act reauthorization reported out by the Environment and Public Works Committee in May includes a three-year, \$10 million-a-year authorization for the development and implementation of a program to improve the quality of Chesapeake Bay. We think that the recognition frequently given by Members of Congress to the severity of the situation in the Bight Apex deserves some comparable authorization of resources. In addition to a restoration plan, we strongly support funding to implement projects identified in that plan. Without this funding, the improvement in Bight conditions which we all seek will remain elusive.

That concludes my prepared remarks. I appreciate the opportunity to appear before you today on behalf of New York City to discuss these important issues. I would be happy to answer any questions you have.



CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
2358 MUNICIPAL BUILDING, NEW YORK, N.Y. 10007 (212) 669-8200

JOSEPH T. MCGOUGH, JR.
Commissioner

September 4, 1985

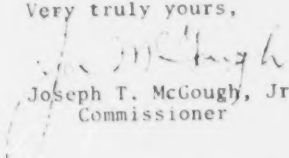
Honorable Frank R. Lautenberg
United States Senate
Committee on Environment and Public Works
SD-410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Lautenberg:

Enclosed are our responses to the questions posed by you in your letter of August 5th.

We appreciate having this further opportunity to make known our views on issues involved in the Ocean Dumping Legislation under consideration, as well as related matters.

Very truly yours,


Joseph T. McGough, Jr.
Commissioner

JTM:dh

Questions From Senator Frank R. Lautenberg
for Commissioner Joseph T. McGough, Jr.

Q1. How do you think you will be disposing of your sewage sludge five years from now?

A1. This is a difficult question to answer. As you know the 106 mile site has only been designated for five years. This five year period begins the date that ocean disposal starts at this site. EPA plans to monitor this new site and make an evaluation of the practice of ocean disposal of sewage sludge during this five year period. We are fairly confident that this monitoring will show no unreasonable degradation of this site. This confidence stems from our evaluation of the toxicity of our sewage sludge as determined in our application for a special permit for the 12 mile site. Using EPA's Ocean Dumping Regulations as a basis for our analysis, we determined that the sludges from our existing water pollution control plants are in compliance with the Environmental Impact Criteria.

If EPA should close the 106 mile site after five years, we would have to review the work that we had done between 1978-1981 investigating land based disposal alternatives. As you remember this included the evaluation of land application of composted sewage sludge on City owned landfills and parklands as an interim solution followed by thermal destruction as a long term land based alternative. Many things have changed since 1981, and a reevaluation of these options as well as any new ones would be necessary.

Q2. Do you think EPA should be accelerating its efforts to develop safe, cost-effective land based alternatives?

A2. One thing that we learned in evaluating land based alternatives in New York City, was that a successful alternative in one area does not always work in another. There are no universal solutions to this problem. Unless EPA approached this on a regional basis, or better yet on a case by case basis it would be an exercise in futility. A municipality has to look at its sludge, examine the available environmentally sound alternatives, the needs of its citizens, the environmental impact of its solutions and the cost of these alternatives and then develop its own solutions.

- Q3. Other coastal sewage authorities have developed land based alternatives for the disposal of their sludge. Why can't the City develop such alternatives?
- A3. There are many constraints which inhibit the development of land based alternatives for large treatment plants in the New York metropolitan area. Among these are little or no available additional land area at the existing water pollution control plants for development of new facilities. Any new development would require acquisition of lands from the private sector through condemnation. Siting may be one of the most exasperating and time consuming aspects of any new facility development.

Because of the make-up of anaerobically digested domestic sewage sludges, application to agricultural lands in New York State may be inappropriate. Unlike the State of Pennsylvania, New York does not have the strip mine "spoiled" areas that lend themselves to sludge or sludge derived compost application. During the development of our land based alternative facility plan study, undertaken from 1978-1981, a marketing analysis was conducted throughout the northeastern United States. The conclusion was that there was no market for New York City sludges in this rather large region. It should be pointed out that New York City anaerobically digests its sludges. This process produces methane gas by destroying nitrogen compounds. This methane gas is then utilized in the operation of the plants. Unfortunately this process reduces the nitrogen content of the sludge to such a degree that it has virtually no fertilizer value. Because of the location of all our plants in heavily populated urban areas, anaerobic digestion is the most appropriate digestion process.

In 1981, the City's consultant had developed a long range plan for the incineration of sewage sludge at three locations throughout the City. It was determined that two out of the three sites would definitely require prevention of significant deterioration permits and the third might require the same. Since that time, because of the extreme pressure being applied on municipalities to close down solid waste landfills, New York City, through its Department of Sanitation, has decided to build five new resource recovery plants. This required plan will even further impact the air quality in the metropolitan area.

As stated above, available landfill areas are rapidly disappearing. Ultimately they will probably only exist for disposal of incinerator ash.

It has often been suggested that New York City seek areas of disposal outside the limits of the City or even outside the limits of New York State. Areas where this is done, including Philadelphia and Western Pennsylvania, continuously have to fight the battle of satisfying the residents of the area receiving the sludge or compost. It makes for a management nightmare that occurs on a regular basis often jeopardizing the whole program.

Questions from Senator Frank R. Lautenberg
for Commissioner Joseph T. McGough, Jr. and Mr. Larry Schmidt

Q_a Do you think we are ever going to clean up the Bight Apex without developing a plan for a cost-effective clean-up of the area?

A_a It is anticipated that New York City will reduce its discharges to near zero in the New York Harbor and consequently the Bight Apex by the mid 1990's. With the removal of sludge disposal from the 12-mile site to the 106-mile site; with the cessation of raw sewage discharges into the Hudson and East Rivers from the North River and Red Hook drainage areas; and with the solution of the combined sewer overflow problem in New York City, New York City will be contributing practically nothing to the degradation of the New York Harbor and Bight Apex. However, as has been stated many times, New York City's contribution to the overall degradation of the Bight Apex was only about five to ten percent of the total. Without an overall clean-up plan, there will be no way to oversee the correction of the other contributing factors to the degradation of this area such as land run-off, other raw sewage discharges, dredge spoil dumping, acid waste dumping, atmospheric fall-out as well as flora and faunal blooms that occur regularly.

Q_b Why do you think the Congress should single out this area as deserving special attention?

A_b In making their decision to close the 12-mile sludge disposal site, EPA declared that the Bight Apex was one of the most severely degraded areas in the world. Although we took exception to the severity of this evaluation, we think that improvements could be and should be made in this area. Since we have stated all along that sludge dumping in the Bight Apex only contributed about five percent of the pollutant load to this area, it is obvious that the remainder comes from a great variety of sources. Because this is an area that involves several states economically, socially, recreationally and aesthetically, it is obvious that Congress should direct special attention to this area much like they have done for Puget Sound and Chesapeake Bay.

STATEMENT OF MR. LAWRENCE SCHMIDT
DIRECTOR, PLANNING GROUP
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION CONTROL
OF THE
SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE
JULY 30, 1985

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE, I AM PLEASED TO OFFER TESTIMONY TODAY ON BEHALF OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE STATE OF NEW JERSEY. I AM HERE IN MY CAPACITY AS THE CHAIRMAN OF THE DEPARTMENT'S OCEAN WASTE MANAGEMENT COMMITTEE. NEW JERSEY HAS BEEN FOLLOWING WITH INTEREST THE LEGISLATIVE PROCEEDINGS IN THE HOUSE OF REPRESENTATIVES ON THE REAUTHORIZATION OF THE MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT AND ESPECIALLY THOSE PROVISIONS DEALING WITH THE NEW YORK BIGHT. WE NOW HAVE BEFORE US A BILL, S-824 INTRODUCED BY SENATOR LAUTENBERG OF NEW JERSEY. THIS MARKS THE FIRST TIME IN RECENT YEARS THAT THE SENATE WILL CONSIDER THIS MUCH NEEDED LEGISLATION. WE CONGRATULATE SENATOR LAUTENBERG FOR HIS INITIATIVE AND THE LEADERSHIP OF THE COMMITTEE FOR THE TIMELY CONSIDERATION OF THIS BILL.

MY REMARKS TODAY WILL FOCUS ON THE NEW YORK BIGHT, ESPECIALLY THOSE ISSUES INVOLVING THE DISPOSAL OF MUNICIPAL SEWAGE SLUDGE FROM THE NEW YORK - NORTHERN NEW JERSEY METROPOLITAN AREA. FIRST, THE STATE OF NEW JERSEY APPLAUDS THE ENVIRONMENTAL PROTECTION'S AGENCY'S FINAL RULEMAKING WHICH, IN EFFECT, DENIED FUTURE USE OF THE 12-MILE SITE FOR DISPOSAL OF MUNICIPAL SEWAGE SLUDGE. WE ALSO CONGRATULATE THE NINE PETITIONERS EFFECTED BY THE EPA DECISION FOR THEIR TEMPERANCE IN NOT DELAYING THE CLOSE-OUT OF

THE 12-MILE SITE BY LEGAL CHALLENGE. THE STATE OF NEW JERSEY CONTINUES TO SUPPORT THE TERMINATION OF SLUDGE DUMPING AT THE 12-MILE SITE AS SOON AS POSSIBLE. WE FURTHER BELIEVE THAT THE RELOCATION OF SLUDGE DISPOSAL TO THE DEEPWATER 106-MILE SITE IS CURRENTLY THE MOST ENVIRONMENTALLY SOUND SOLUTION FOR THE NEARLY 8 MILLION WET TONS PER YEAR OF SEWAGE SLUDGE GENERATED BY THE NINE AFFECTED SEWERAGE AGENCIES.

THREE WEEKS AGO REGION II OF THE EPA ANNOUNCED THAT IT HAD NEGOTIATED PHASE-OUT SCHEDULES WITH THE CURRENT USERS OF THE 12-MILE SITE. ALTHOUGH WE WERE DISAPPOINTED THAT THE NEGOTIATING PARTIES COULD NOT DEVELOP SCHEDULES TO END ALL DUMPING AT THE 12-MILE SITE WITHIN 18 MONTHS. HOWEVER, AFTER CAREFUL ANALYSIS OF THE AGREED UPON SCHEDULES AND CONSULTATION WITH EPA, NEW YORK CITY AND THE NEW JERSEY AUTHORITIES, WE UNDERSTAND THAT THE AGREEMENTS REPRESENT A REALISTIC -- AND WE HOPE FIRM -- TIMEFRAME FOR A RAPID AND ORDERLY PHASEOUT. WE ARE SOMEWHAT DISTURBED OVER THE FACT THAT THE NEGOTIATED AGREEMENTS DO NOT CONTAIN PENALTIES FOR FAILING TO MEET THE PHASEOUT SCHEDULE. WITHOUT PENALTIES, THERE MAY NOT BE SUFFICIENT MOTIVATION ON THE PART OF THE SEWERAGE AGENCIES TO ENSURE THE PHASEOUT IS COMPLETED IN THE SHORTEST TIMEFRAME.

THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS MAINTAINED ALL ALONG THAT THE PHASEOUT COULD AND SHOULD BE COMPLETED WITHIN AN 18 MONTH PERIOD. THIS PROJECTION WAS PREDICATED ON THE INSTITUTIONAL ARRANGEMENTS NECESSARY FOR THE SEWERAGE AGENCIES TO MAKE THE TRANSITION. FRANKLY WE DID NOT CONSIDER IN DEPTH THE CAPABILITY

OR LACK THEREOF OF THE MARINE TRANSPORTATION INDUSTRY TO GEAR UP WITH VESSELS EITHER IN THE EXISTING FLEET AND/OR NEW OR RETROFITTED VESSELS. THE NEW JERSEY AUTHORITIES ARE WHOLLY DEPENDENT ON THE PRIVATE SECTOR TO RESPOND IN A TIMELY FASHION. IF A SUFFICIENT NUMBER OF VESSELS EXISTED AND IF THE VESSELS WERE SEAWORTHY AND HAD COST EFFECTIVE SLUDGE CAPACITIES, THEN WE WOULD CONTINUE TO MAINTAIN THAT AN 18 MONTH PHASEOUT IS A READILY ACHIEVABLE TARGET.

HOWEVER, THIS DOES NOT SEEM TO BE THE CASE. CLEARLY, THE TWO MOST SIGNIFICANT REASONS FOR THE PHASEOUT SCHEDULE ADOPTED ARE THE LACK OF AVAILABLE VESSELS TO IMMEDIATELY ACCOMMODATE ALL NINE SEWERAGE AGENCIES AND THE LACK OF PRIVATE SECTOR INCENTIVES TO MAKE LARGE CAPITAL EXPENDITURES BASED ON EPA'S FIVE YEAR DESIGNATION OF THE 106-MILE SITE.

IN THE ABSENCE OF A COMPREHENSIVE MULTI-MEDIA ASSESSMENT OF ALL SLUDGE DISPOSAL OPTIONS, THE 106-MILE SITE HAS EMERGED AS THE ENVIRONMENTALLY PREFERRED ALTERNATIVE IN THE INTERIM. LAND BASED DISPOSAL OPTIONS ARE NOT CURRENTLY BEING PURSUED BY THE SEWERAGE AGENCIES. THEREFORE, THE 106-MILE SITE NEEDS TO BE RECOGNIZED FOR WHAT IT IS, THE ONLY IMPLEMENTABLE DISPOSAL ALTERNATIVE THAT HAS A DEGREE OF ENVIRONMENTAL ACCEPTABILITY. RECOGNITION SHOULD BE GIVEN TO THE 106-MILE SITE AS AN INTERMEDIATE TERM SOLUTION. I BELIEVE WE MAY HAVE TO CONSIDER A REVIEW OF THE DESIGNATION IN FIVE YEAR INTERVALS BASED ON RESULTS OF ENVIRONMENTAL MONITORING AND ANALYSIS -- WITHOUT CLOSING OUT THE POSSIBILITY THAT THE SITE WILL CONTINUE TO BE USED. A LONGER TERM DESIGNATION MAY BE WHAT WILL

BE NECESSARY TO ATTRACT PRIVATE INVESTMENT. WITHOUT AN INTERMEDIATE TERM COMMITMENT, I FEAR THAT OUR GOAL OF TOTAL PHASEOUT OF THE 12-MILE SITE MAY NOT BE ACHIEVED, OR ACHIEVED ONLY WITH SHOCKING RATE INCREASES. - IF THE PRIVATE SECTOR RESPONDS TO PUBLIC BIDDING WITH ONLY THREE TO FIVE YEARS OF CERTAINTY, WE PRESUME THE COST WILL REFLECT AMORTIZATION OF THE CAPITAL INVESTMENT IN THAT CONTRACT PERIOD. THE COST COULD BE SO STAGGERING AS TO BE COUNTERPRODUCTIVE TO THE TOTAL PHASEOUT OF THE 12-MILE SITE. EPA AND THE CONGRESS MUST ADDRESS THIS ISSUE BEFORE WE GET BOGGED-DOWN IN A WELL MEANING YET UNACHIEVABLE PHASEOUT PROCESS.

THE STATE OF NEW JERSEY HAS SUPPORTED THE GENERAL REAUTHORIZATION PROVISIONS OF THE MPRSA AS INCORPORATED IN HR 4829 WHICH WAS PASSED BY THE HOUSE OF REPRESENTATIVES LAST FALL AND ARE NOW INCLUDED IN HR 1957. WE FIND THE "OCEAN REVITALIZATION ACT OF 1985" (S-824) TO BE GENERALLY COMPLEMENTARY TO THE LEGISLATION MOVING FORWARD IN THE HOUSE OF REPRESENTATIVES. I WOULD LIKE TO TAKE THESE FINAL FEW MOMENTS TO COMMENT ON SEVERAL ASPECTS OF S-824.

THE STATE CONTINUES TO SUPPORT THE CONCEPT OF A BIGHT APEX RESTORATION PLAN. SENATOR LAUTENBERG'S BILL GOES A STEP BEYOND AND WIDENS THE STUDY EFFORT TO INCLUDE THE HUDSON-RARITAN ESTUARY. WE ENDORSE THIS EXPANSION OF THE ORIGINAL CONCEPT SINCE WE HAVE MAINTAINED FOR QUITE SOME TIME THAT THE GREATEST FACTOR INFLUENCING ENVIRONMENTAL DEGRADATION WITHIN THE BIGHT APEX IS THE ESTUARINE EFFLUENT DISCHARGE PLUME. THIS PLUME CONSISTS OF

BILLIONS OF GALLONS OF FRESHWATER RUNOFF, TREATED AND UNTREATED WASTEWATER, URBAN RUNOFF, AGRICULTURAL RUNOFF, AND TOXIC DISCHARGES OF AN ACCIDENTAL, INADVERTENT OR ILLEGAL NATURE. WE WELCOME A BIGHT RESTORATION PLANNING PROCESS THAT WILL FOCUS ON THE COMBINED ACTIVITIES OF MAN ON LAND AS IT SUBSEQUENTLY EFFECTS THE OCEAN AND ITS LIVING MARINE RESOURCES.

IN OUR TESTIMONY ON HR 1854 (HUGHES OF NEW JERSEY), WE SPECIFICALLY ASKED THAT LANGUAGE BE ADDED THAT WOULD GIVE THE AFFECTED STATES A MORE ACTIVE ROLE IN THE PREPARATION OF THE PLAN AND IN THE DECISION-MAKING ON POLICY ASPECTS OF A BIGHT RESTORATION STRATEGY. THE SUCCESS OF IMPLEMENTING A PLAN WILL REQUIRE THE FULL SUPPORT AND COOPERATION OF THE STATES OF NEW JERSEY AND NEW YORK AND NEW YORK CITY. WE ASK THAT YOUR SUBCOMMITTEE FAVORABLY CONSIDER OUR REQUEST AND WE BE GIVEN THE RESPONSIBILITY OF WORKING WITH EPA IN THE PLANNING PROCESS.

S-824 ALSO CALLS ON EPA TO PREPARE WITHIN 18 MONTHS A COMPREHENSIVE ASSESSMENT OF LAND-BASED DISPOSAL OPTIONS FOR THE CURRENT OCEAN DUMPERS. WE FAVOR THE EXPANSION OF THAT CONCEPT TO INCLUDE BOTH LAND AND OCEAN DISPOSAL IN A COMPREHENSIVE MULTI-MEDIA ASSESSMENT. SIGNIFICANT RESOURCES WERE EXPENDED BY THE INTERSTATE SANITATION COMMISSION AND THE SEWERAGE AGENCIES ON LAND-BASED ALTERNATIVES DURING THE PERIOD FROM 1977-1981. HOWEVER, AN UPDATE OF THAT WORK COULD NOT ANSWER THE QUESTION OF WHICH DISPOSAL MEDIUM IS THE MOST ENVIRONMENTALLY PREFERABLE. ONLY A COMPREHENSIVE MULTI-MEDIA ASSESSMENT IS CAPABLE OF PRODUCING THAT TYPE OF RESULT. EVEN THOUGH WE ARE AT THE

THRESHOLD OF MOVING TO A DEEPWATER OCEAN DISPOSAL MODE, IT IS NOT TOO LATE TO CONSIDER EACH AND EVERY LONG TERM OPTION.

FINALLY, WE WISH TO ENDORSE THE MONITORING PROVISIONS IN S-824 AS BOTH NECESSARY AND APPROPRIATE. IN APPLYING THOSE PROVISIONS TO THE 106-MILE SITE, WE HAVE CONSULTED WITH EPA AND NOAA ON THEIR PROPOSED MONITORING STRATEGY. THE STRATEGY INVOLVING A HIERARCHY OF MONITORING ACTIVITIES IS WELL THOUGHT-OUT AND SUFFICIENTLY COMPREHENSIVE TO DETERMINE THE EFFECTS OF OCEAN DISPOSAL OF MUNICIPAL SLUDGE. INITIALLY FUNDING FOR THE MONITORING SHOULD BE BORNE BY THE FEDERAL AGENCIES AND ULTIMATELY ASSESSED ON THE DUMPERS THROUGH SPECIAL DISPOSAL FEES. CONTINUED MONITORING OF THE 12-MILE SITE TO RECORD ANTICIPATED ENVIRONMENTAL RECOVERY IS ALSO ENDORSED.

COMPLIANCE MONITORING SHOULD ALSO INCLUDE STATE OF THE ART ELECTRONIC SURVEILLANCE GEAR SUCH AS THE SO-CALLED "BLACK-BOX". IF THE COAST GUARD AND EPA CANNOT REFINE THE TECHNOLOGY PRIOR TO THE COMMENCEMENT OF DUMPING AT THE 106-MILE SITE, EFFORTS SHOULD BE MADE TO PERMIT THE PRIVATE SECTOR TO DEVELOP THIS EQUIPMENT UNDER CONTRACT.

THANK YOU FOR THE OPPORTUNITY TO TESTIFY. I WOULD BE PLEASED TO ANSWER ANY OF YOUR QUESTIONS.



STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF THE COMMISSIONER
CN 402
TRENTON, N.J. 08625
609-292-2885

September 23, 1985

Honorable Frank Lautenberg
United States Senate
717 Hart Senate Office Building
Washington, DC 20510

Dear Senator Lautenberg:

I am responding to your letter of August 5, in which you requested answers to a series of questions concerning ocean dumping. My answers are as follows:

- A. 1) Is it the State of New Jersey's position that the schedule EPA has negotiated ends dumping at the 12-mile Site in an expeditious cost-effective manner?

We have reviewed the negotiated agreements and concur with EPA that the schedules are realistic for the purposes of obtaining a rapid and orderly phaseout.

- A. 2) A few months ago at the House Merchant Marine and Fisheries Committee hearings on the Ocean Dumping Act, you testified in favor of enacting an 18 month phase-out of dumping at the 12-mile Site. What does New Jersey now recommend that the Congress do regarding closing of the 12-mile Site?

Although we were disappointed that the negotiating parties could not develop schedules to close the 12-mile Site within 18 months, we have accepted the timeframes agreed upon by EPA. Therefore, Congressional intercession to force an 18 month phase-out may be counterproductive to an orderly move. We recommend now that the proposed legislation be amended to delete the 18 month provision.

- A. 3&4) Your statement says that you are concerned over the lack of penalties for failing to meet the phase-out schedule. Is New Jersey recommending that Congress enact a penalty provision? If yes then would you please submit for the record a penalty proposal?

Yes, we recommend a penalty provision and that provision should be along the lines of a daily amount equal to the estimated cost differential between disposal at the 12-mile and 106-mile Sites.

100% Recycled

-2-

- B. 1) In your opinion will ocean dumping of sewage sludge for the existing dumpers be the best disposal option five years from now?

Given what we know now about alternatives continued ocean disposal of municipal sludge will probably remain the most realistic disposal option five years from now.

- B. 2) Is it the State's position that we now should legislate a designation of the 106-mile Site to allow dumping to continue for more than 5 years?

At this time it is probably not necessary to take that step.

- B. 3) Does the State believe EPA should be increasing its efforts to develop safe methods to dispose of sludge?

We would welcome an increased commitment by EPA to develop sludge management techniques. This could be accomplished by research and development and/or information transfer -- highlighting technological improvements from throughout the world.

- B. 4) Does the State support the comprehensive assessment of disposal actions which would be required by my bill?

On a number of occasions we have testified on the need for a true comprehensive multi-media assessment, one which would evaluate the environmental risks and benefits to the air, the land (groundwater), and the ocean. We do not favor a land based assessment solely.

- B. 5) What efforts does New Jersey have underway to develop sludge disposal options?

I am attaching for your consideration a copy of our Department's Draft Sludge Management Plan (summary). As you will note, the DEP has placed considerable resources into both the management hierarchy and the technological applications.

- C. The State's position on S-824 and recommendations to amend the bill.

As I indicated in my testimony on July 30, the Department is in support of S-824 with the following amendments:

1. deletion of the provision requiring a complete phase-out of the 12-mile Site within 18 months.
2. expand the section which would require EPA to prepare a comprehensive assessment of land-based disposal options to a comprehensive multi-media assessment. The multi-media assessment should include all disposal options.

3. the role of the States' of New Jersey and New York should be expanded in the preparation and final consideration of a New York Bight Apex/Hudson Raritan Estuary Restoration Plan.

1. A) Do you think we are ever going to clean-up the Bight Apex without developing a plan for a cost-effective clean-up of the area?

To clean-up the Bight Apex, we must first focus our efforts on all of the discharges which eventually reach the Bight via the effluent plume. The question should be restructured to ask if 9 billion dollars is cost effective. That is the amount necessary over the next 25 years for New Jersey to address the environmental infrastructure requirements on the public side of water and waste management. Nine billion dollars is needed to upgrade wastewater treatment facilities, close existing landfills to halt water pollution from leachate, and find methods to move beyond landfills into environmentally superior waste management technologies. It does not include comparable infrastructure requirements for the Hudson River Basin and Long Island in New York State plus all of the current non-point sources of pollution (urban and highway runoff, agricultural runoff, siltation and sedimentation from soil erosion, and atmospheric fallout of air pollutants) and point source industrial discharges. The plan is needed to direct attention to the relationship between the cumulative activities of 25 million people within the affected region and the resultant pollution in our coastal waters, our estuaries, and the Bight Apex itself. Cleanups of this size can not be considered solely on the basis of cost effectiveness.

1. B) Why do you think the Congress should single out this area as deserving special attention?

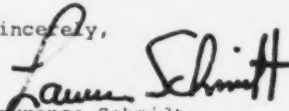
The New York Bight and the coastlines of New Jersey and Long Island represent an economic and environmental resource that is dependent upon relatively clean water. New Jersey's shore economy as measured in tourism and recreational fishing is worth more than \$4 billion per year. The Port of New York and New Jersey has an even larger economic impact on the region. Both the shore and the port are affected by ocean waste management.

Polluted waters closed some New Jersey beaches at the height of the 1985 tourism season, shellfish harvesting areas in the Bight Apex are closed because of pollution, and harbor dredging has been shut down when pollutants from many sources settle onto the sediments which must be dredged to permit the passage of vessels in marine commerce. These are but a few examples of the economic, environmental and public health issues that require the immediate attention of Congress.

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I trust that these responses adequately address the issues you raised. If you have any further questions please feel free to contact me directly.

Sincerely,


Lawrence Schmidt
Director
Planning Group

LS/ss

cc: Fran Barber,
Washington Office

QUESTIONS FOR LARRY SCHMIDT

- A. 1) IS IT THE STATE OF NEW JERSEY'S POSITION THAT THE SCHEDULE EPA HAS NEGOTIATED ENDS DUMPING AT THE 12 MILE SITE IN AN EXPEDITIOUS, COST-EFFECTIVE MANNER?
- 2) A FEW MONTHS AGO AT THE HOUSE MERCHANT MARINE AND FISHERIES COMMITTEE HEARINGS ON THE OCEAN DUMPING ACT, YOU TESTIFIED IN FAVOR OF ENACTING AN 18 MONTH PHASE OUT OF DUMPING AT THE 12 MILE SITE. WHAT DOES NEW JERSEY NOW RECOMMEND THAT THE CONGRESS DO REGARDING CLOSING OF THE 12 MILE SITE?
- 3) YOUR STATEMENT SAYS THAT YOU ARE CONCERNED OVER THE LACK OF PENALTIES FOR FAILING TO MEET THE PHASE OUT SCHEDULE. IS NEW JERSEY RECOMMENDING THAT CONGRESS ENACT A PENALTY PROVISION?
- 4) IF YES THEN:
- WOULD YOU PLEASE SUBMIT FOR THE RECORD A PENALTY PROPOSAL?
- B. MR. SCHMIDT, I WANT TO EXAMINE THE STATE'S POSITION ON ALTERNATIVES TO OCEAN DUMPING OF SEWAGE SLUDGE.

- 1) IN YOUR OPINION WILL OCEAN DUMPING OF SEWAGE SLUDGE FOR THE EXISTING DUMPERS BE THE BEST DISPOSAL OPTION FIVE YEARS FROM NOW?
2. IS IT THE STATE'S POSITION THAT WE NOW SHOULD LEGISLATE A DESIGNATION OF THE 106 MILE SITE TO ALLOW DUMPING TO CONTINUE FOR MORE THAN 5 YEARS?
- 3) DOES THE STATE BELIEVE EPA SHOULD BE INCREASING ITS EFFORTS TO DEVELOP SAFE METHODS TO DISPOSE OF SLUDGE?
- 4) DOES THE STATE SUPPORT THE COMPREHENSIVE ASSESSMENT OF DISPOSAL ACTIONS WHICH WOULD BE REQUIRED BY MY BILL?
- 5) WHAT EFFORTS DOES NEW JERSEY HAVE UNDERWAY FOR SLUDGE DISPOSAL?

C. MR. SCHMIDT, I WOULD LIKE TO RECEIVE FROM THE DEP FOR THE RECORD THE STATE'S POSITION ON MY BILL AND ANY RECOMMENDATIONS THE STATE HAS TO AMEND THE BILL.

QUESTIONS FOR MR. SCHMIDT AND MR. MCGOUGH

1. BOTH OF YOU HAVE INDICATED SUPPORT FOR THE RESTORATION PLAN WHICH MY BILL WOULD REQUIRE EPA TO DEVELOP.
- A. DO YOU THINK WE ARE EVER GOING TO CLEAN UP THE BIGHT APEX WITHOUT DEVELOPING A PLAN FOR A COST-EFFECTIVE CLEANUP OF THE AREA?

1/85
DRAFT

ATTACHMENT 1

SUMMARY

STATEWIDE SLUDGE MANAGEMENT PLAN

The Statewide Sludge Management Plan is a component of the Statewide Solid Waste Plan and is mandated by State Statute under the Solid Waste Management Act 13:1E-6a.(3) and 13:1E-46. Although it is called the Sludge Management Plan, the plan addresses management of all residuals generated by the domestic waste water treatment process. Disposal of these materials in New Jersey has become increasingly difficult due to the ever increasing volumes generated and the decreasing numbers of disposal sites; most particularly access to landfills has become restricted to effectively two landfills in southern New Jersey.

The Statewide Sludge Management Plan is a blueprint for resolving the residuals management and disposal problems in the state. The Plan establishes the standards, criteria and objectives by which District Sludge Management Plans will be judged for inclusion in the State Solid Waste Management Plan, and consistency with the State and District Solid Waste Management Plans is a determining factor in approval of disposal facilities.

The Statewide Sludge Management Plan is structured to analyze the existing and future residuals management problems, the existing technologies and facilities for resolving those problems, and the financial needs and means to implement additional facilities. The Plan is presented in six major parts:

PART 1

The Introduction to the Plan - Explains the format and use of the Plan, defines sludge, explains the purpose and authority of the Statewide Sludge Plan, gives a history of the problem, defines the responsibilities for resolving sludge management problems (state, District, 201 Agencies, individual generators, and the public), and describes the public participation process, including the work of the Sludge Task Force.

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PART 2

Applicable Legislation, Regulations and Policy - Lists and describes the various state and federal laws, regulations, and guidelines relating to sludge management, defines New Jersey's Policy on Land Based Sludge Disposal, on "clean" sludge, on storage of sludge, and departmental strategy for implementing the Disposal Policy.

PART 3

Existing Conditions - This part is presented in two major sections. The first section addresses the status of sludge disposal in New Jersey, and the second section addresses the status of sludge related planning in New Jersey. The first section presents various tables of inventories on a county-by-county basis. These tables include inventories of existing facilities including digestion, dewatering, and disposal; inventories of the disposal modes currently in use; projected sludge production. The first section, also, evaluates the state's potential for managing sludge through agricultural applications, and determines that pretreatment of industrial wastes would be required, but existing crop acreage in the state is roughly six times greater than required acreage for the worst case sludge projections.

The second section of Part 3 reviews the county-by-county progress of planning for pretreatment of industrial wastes, septage management, 201 sludge management, and sludge planning by Solid Waste Management Districts. This review is important to the integration and cross adoption of these plans, since inconsistencies will confuse and obstruct the implementation of necessary sludge facilities.

PART 4

Disposal Alternatives - This part is divided into six major sections plus an introduction. Each section is devoted to examining a specific disposal mode and the format for each section is identical. Each section begins with an introduction, and then states the departmental policy applicable to the disposal mode, explains the technical aspects of the process and identifies potential environmental impacts associated with process, identifies applicable legislation and regulations which address those impacts, describes the permitting process, gives a list of sources of information and guidance, and inventories the existing New Jersey facilities of that type. This format is applied to the following disposal alternatives: Land Application, Composting, Incineration, Landfilling, Ocean Disposal, and Innovative and Alternative Systems. Part 4 points out that every disposal alternative has associated environmental impacts and explains how the permitting and regulatory process must be used to control the impacts. The important message of Part 4 is that selection of disposal alternatives is frequently, a question of picking the least bad solution.

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PART 5

Financial Alternatives - This part presents the State Policy on Financing Sludge Projects and suggests a variety of financing approaches which might be employed for implementing the selected disposal alternative. The financing approaches are divided into public financing tools (pay-as-you-go, bonding, grant programs, loan programs), private financing, and mixed public and private funding. The regulatory controls and tax benefits associated with these approaches are discussed. The development of user costs is, also discussed.

PART 6

Conclusions - This part of the Plan summarizes the findings of the Plan and defines the planning responsibilities of Districts, 201 Agencies, and the Individual Sludge Generators. It establishes the framework for designation of Lead Agencies, and for the development of the District Sludge Management Plans (standards, goals, and criteria) it requires appropriations for planning and implementation of necessary facilities, establishes time schedules, and requires cross adoption with 201 plans. The Conclusions Part, also, describes the future tasks of the state's Sludge Management Program.

There are several aspects of the Plan which particularly merit the public's attention at this time. Consistent with the resource recovery and reuse objectives of the Solid Waste Management Act, the Plan favors the use of land application and incineration modes of disposal and proposes to eliminate landfilling of sludges wherever possible. The Plan, also, recognizes that it would be impossible from a practical stand-point to terminate ocean disposal until alternative disposal facilities can be implemented. Therefore, the Plan recommends a five year extension at the 12 mile site with an accompanying dumping fee which would be allocated for enforcement, research, and construction of land based disposal alternatives if warranted by research findings. Lastly, it is the intention of the department to provide a basis for development of residuals waste flow rules in the Plan. The department has determined that a waste flow rule making will be necessary to the financial survival of facilities which might be constructed to manage the specific residuals disposal needs of a given planning area, since residuals flows provide the revenue source for debt retirement on these facilities.

During the next two months, staff of the sludge management program, and members of the Sludge Task Force will be meeting with counties, sewerage authorities and other interested groups to explain the planning effort and generate additional public recommendations and comments which can be incorporated in the Plan. A schedule of

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these meetings will be announced in local newspapers. These meetings are preliminary to finalization of the first draft of the Plan for public distribution and review. After the Draft Plan is released, the public hearings will be held on the Plan. Additional information on the Statewide Sludge Plan can be obtained through writing to:

Helen P. Chase, Supervisor
Program and Regulatory Development
Bureau of Ground Water Discharge Permits
Division of Water Resources
CN 029
Trenton, New Jersey 08625

SLUDGE TASK FORCE

The Sludge Task Force was created by the Director, Division of Water Resources in April, 1982, to facilitate two-way communication with affected publics. The Sludge Task Force meets roughly once a month, and is assisted by staff from various state permitting and review agencies with responsibilities for aspects of sludge planning and disposal. Each one of the members of the Task Force represents an involved constituency: Authorities Association of New Jersey, New Jersey League of Municipalities, Solid Waste District Coordinators, Health Officers, Developers, Environmentalists, Agriculture, Haulers, State Agencies (Division of Water Resources and Division of Waste Management), Consultants, Academia, and Sludge Generators. Of course, in a sense, we are all "involved constituents," because we all generate human waste, but it is impossible to include all interests on an advisory committee such as the Sludge Task Force. The composition of the Sludge Task Force was an attempt to balance necessary broad representation against the inefficiency of a very large committee. The Task Force numbers 17, and attendance and participation has been high, so when the various staff assistants are, also, present, there are frequently as many as 25 people engaged in discussions. If all angles are not discussed during these sessions, it is fair to say that the vast majority are, and meetings often last in excess of three hours.

SLUDGE TASK FORCE MEMBERS

NAME	AFFILIATION	ADDRESS	PHONE #
Robert W. Simkins	Burlington County Solid Waste Coordinator	Burlington Co. Health Dept. Woodlane Rd., Mt. Holly NJ 08060	609/267-0631
Michael Dimino	Stony Brook R.S.A./AANJ	P.O. Box 365, River Road Princeton, NJ 08540	609/924-8881
William Francisco	Rockaway Valley R.S.A./AANJ	R.D. 1-99 Green Bank Road Boonton, NJ 07005	201/263-1555
William Schluter	New Jersey First, Inc.	Route 31 2490 Pennington Road Trenton, NJ 08638	609/883-3003
John E. Trafford	League of Municipalities	407 West State Street Trenton, NJ 08618	609/695-3481
Thomas Blanchet	Freehold Cartage	Box 14-5 R.D. #5 Freehold, NJ 07728	201/462-1001
Dr. Joseph Munter	Rutgers University	Dept. of Env. Sciences Cook College, P.O. Box 231 New Brunswick, NJ 08903	201/932-9571
Mark Singley (Alternate)	Rutgers University	Dept. of Agr. Engineering Cook College, P.O. Box 231 New Brunswick, NJ 08903	201/932-9753
Arnold Bellush	Western Monmouth U.A.	Galahad Drive Manalapan, NJ 07726	201/536-4329
Peter A. Nese	Camp Dresser & McKee, Inc.	Raritan Plaza III-Raritan Ctr. Edison, NJ 08817	201/255-7000
Sean M. Reilly	Envir. & Land Use Counseling/ So. Jersey Builders Assoc.	2001 D Green Tree Executive Campus Marlton, NJ 08053	609/983-6200
Herbert L. Kaufman	Clinton Bogert	2125 Center Avenue Fort Lee, NJ 07024	201/944-1676

SLUDGE TASK FORCE MEMBERS CONT.

<u>NAME</u>	<u>AFFILIATION</u>	<u>ADDRESS</u>	<u>PHONE #</u>
Karl A. Fenske, Esq.	Environmental Lawyer	18 Elm Street Morristown, NJ 07960	201/455-0030
Steven Nieswand	NJDEP-DWR, Construction Grants Admin.	CN 029 Trenton, NJ 08625	609/984/7945
Dr. Merry L. Morris	NJDEP-DWM, Hazardous Site Mitigation Administration	8 East Hanover Street Trenton, NJ 08625	609/984-3068
Lino Pereira	NJDEP-DEQ, Solid Waste State Soil Conservation Commission	Dept. of Agriculture CN 330 Trenton, NJ 08625 (Health & Agriculture Bldg. Department of Agriculture)	609/292-5540
Laurence Devlin	Salem County Health Dept.	Salem County Health Dept. Box 346 Woodstown, N.J. 08098	609/769-2126

PUBLIC'S ROLE IN STATEWIDE SLUDGE MANAGEMENT PLANNING

Whether through sewer or septic systems, the end product of human waste treatment is clean water plus sludge residual, and the treatment costs money. Nothing is free in this world, and as with most things, the public must pick up the tab for sludge disposal. Sludge disposal used to be cheap and easy in the days of abundant landfills and little environmental or health regulation, but the sludge disposal of the present day is costly and difficult. Since most of us are not "high rollers," we all have a serious financial interest in sludge management planning.

In addition to the financial interests, the public has a vested interest in the environmental and health impacts of sludge disposal. Each one of the disposal alternatives has its own health and environmental implications; ocean disposal has impacts on fish and shellfish production, incineration has air quality impacts, land-filling has impacts on water supplies, and land application can have impacts on ground water and crop production if not properly controlled. Of course the greatest protection methods, may carry the greatest price tag. So the public is strongly encouraged to comment on the development of the Statewide Sludge Management Plan.

To facilitate communication with the public on sludge management and disposal, the Sludge Task Force has been divided into areas of responsibility, and wherever possible the public should channel their comments through the appropriate Task Force member as follows:

OCEAN DISPOSAL - Herb Kaufman	201/944-1676
LAND APPLICATION - Arnold Bellush	201/536-4329
HEALTH CONCERNS - Larry Devlin	609/769-2126
LANDFILLING - Bill Francisco	201/263-1555
COMPOSTING - Mark Singley	201/932-9753
INCINERATION - Pete Nese	212/432-6700
INNOVATIVE ALTERNATIVES - Joe Hunter	201/932-9571
HAULER'S CONCERNS - Tom Blanchet	201/462-1001
SLUDGE GENERATORS CONCERNS - Mike Dimino	609/924-8881
SOLID WASTE DISTRICT CONCERNS - Bob Simkins ...	609/267-0631
AGRICULTURAL CONCERNS - Sam Race	609/292-5540
MUNICIPAL CONCERNS - Jack Trafford	609/695-3481
ENVIRONMENTAL CONCERNS - Karl Fenske	201/455-0030
DEVELOPER'S CONCERNS - Sean Reilly	609/983-6200
GENERAL CONCERNS - Bill Schluter	609/883-3003

Both the Task Force and the state staff responsible for writing the Sludge Plan would welcome your comments.

PART 1

INTRODUCTION

- I. FORMAT AND USE OF THE STATEWIDE SLUDGE MANAGEMENT PLAN
- II. DEFINITION OF SLUDGE
- III. PURPOSE AND AUTHORITY
- IV. HISTORY OF THE PROBLEM
- V. RESPONSIBILITIES FOR PROBLEM RESOLUTION
 - A. STATE RESPONSIBILITIES
 1. Planning
 2. Permitting and Approvals
 3. Enforcement
 4. Implementation
 - B. SOLID WASTE DISTRICT RESPONSIBILITIES
 1. Planning
 2. Permitting and Approvals
 3. Enforcement
 4. Implementation
 - C. 208 AGENCIES RESPONSIBILITIES
 1. Planning
 2. Permitting and Approvals
 3. Enforcement
 4. Implementation
 - D. SLUDGE GENERATORS' RESPONSIBILITIES
 1. Planning
 2. Permitting and Approvals

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3. Enforcement

4. Implementation

E. PUBLIC RESPONSIBILITIES

F. INTEGRATION OF RESPONSIBILITIES

Chart of Responsibilities

VI. PUBLIC PARTICIPATION

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APPLICABLE LEGISLATION, REGULATIONS, AND POLICY

- I. INTRODUCTION
- II. LEGISLATION AND REGULATIONS
 - A. APPLICABLE FEDERAL LAWS
 - B. APPLICABLE FEDERAL REGULATIONS
 - C. APPLICABLE NEW JERSEY LAWS
 - D. APPLICABLE NEW JERSEY REGULATIONS
- III. GUIDELINES
- IV. NEW JERSEY POLICY ON LAND BASED SLUDGE DISPOSAL
 - A. POLICY STATEMENT
 - B. "CLEAN" SLUDGE POLICY
 - 1. Land Application Criteria for "Clean" Sludge
 - a. Definition
 - b. Basis for Land Applicable Criteria
 - c. Use of Land Applicable Sludge Criteria
 - 2. Thermal Reduction (Incineration) Criteria for "Clean" Sludge
 - C. DEPARTMENT IMPLEMENTATION OF LAND BASED SLUDGE DISPOSAL POLICY
 - D. POLICY ON STORAGE OF SLUDGE
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 - a. Existing Sludge Disposal
 - b. Dewatering Needs for Disposal Modes
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 - a. Existing Sludge Production
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 - g. Acreage Required for Existing Land Applicable Sludges
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2. Statutory Authority and Regulations
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C. 201 SLUDGE MANAGEMENT PLANNING

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2. Statutory Authority and Regulations
3. Status of 201 Planning

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- III. COMPOSTING
- IV. INCINERATION
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- B. Nutrient Impacts
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- A. Discussion
- B. Permit Process^a
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- III. TECHNICAL ASPECTS
 - A. GENERAL DISCUSSION
 - B. COMPOSTING METHODS
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 - 2. Aerated Static Pile Composting
 - 3. Mechanical Composting
 - 4. Other Composting Processes
- IV. ENVIRONMENTAL IMPACTS OF COMPOSTING
 - A. ENVIRONMENTAL IMPACTS OF COMPOSTING OPERATION
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 - 2. Odors
 - 3. Dust and Particulate Impacts
 - 4. Pathogens
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- b. Compost Testing
- c. Record Keeping
- d. Processing Requirements
 - 1) Temperature Achievement
 - a) Aerated Static Pile
 - b) Windrowing Systems
 - c) Within-Vessel Composting
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 - b) Windrowing Systems
 - c) Within-Vessel Composting
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- 2) Windrowing Systems
- 3) Within-Vessel Composting
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- F. SLUDGE DRYING AND SUBSEQUENT LAND APPLICATION OR BURNING

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- A. AIR POLLUTION EMISSIONS
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- A. AIR EMISSIONS
 - 1. Federal Clean Air Act
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 - a. New Permit Required
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- III. TECHNICAL ASPECTS
 - A. SLUDGE TRANSPORTATION AND INCORPORATION
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- 5. Operation Procedures
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 - 2. Sludge Transportation
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- VIII. EXISTING OCEAN DISPOSAL
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- A. ALTERNATIVE TECHNOLOGY
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- A. RISK VERSUS POTENTIAL STATE-OF-THE-ART ADVANCEMENT
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- C. INNOVATIVE/ALTERNATIVE SYSTEM OBJECTIVES AND BENEFITS
 - 1. Improved Operational Reliability
 - 2. Improved Toxics Control
 - 3. Increased Environmental Benefits
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- D. AVAILABLE ALTERNATIVE PROCESSES
 - 1. Alternative Sludge Treatment Processes
 - a. Aerobic Digestion
 - b. Autothermal Thermophilic (Oxygen) Digestion
 - c. Composting
 - d. Drying Processes
 - 1) Flash Drying
 - 2) Spray Drying
 - 3) Rotary Drying
 - 4) Multiple Hearth Drying

2. Alternative Sludge Disposal Processes

- a. Co-incineration of Sludge and Solid Waste
- b. Land Application of Sludge
- c. Incineration of Sludge - Fluidized Bed Furnace
- d. Incineration of Sludge - Multiple Hearth Furnace
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E. AVAILABLE INNOVATIVE PROCESSES

1. Innovative Sludge Treatment Processes

- a. Oil-Emersion Dehydration
- b. Oxyozonation of Sludge
- c. Freeze-Thaw Process

2. Innovative Sludge Disposal Processes

- a. Starved Air Combustion of Sludge
- b. Melting Furnace for Sludge
- c. Incineration of Sludge - Rotary Kiln
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- II. STATE POLICY REGARDING FINANCING OF RESIDUALS DISPOSAL FACILITIES
- III. ALTERNATIVE FINANCING METHODS FOR IMPLEMENTING SLUDGE MANAGEMENT - PROGRAM/FACILITIES
 - A. PUBLIC FINANCING
 1. Types of Financing Arrangements
 - a. Pay-as-You-Go
 - b. Bonding
 - 1) Definitions
 - a) General Obligation Bonds
 - b) Revenue Bonds
 - 2) Bond Marketability
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 - c. Grant Programs
 - 1) 201 Grant Program
 - 2) Farmers Home Grant
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 - 1) Farmers Home Loan Program
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 - a. Local Public Contracts Law
 - b. Local Fiscal Affairs Law
 - c. Local Bond Law
 - d. Local Budget Law
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- f. Powers and Authorities under Enabling Legislation
 - 1) Agencies with Explicit Statutory Authority for Bonding Sludge Projects
 - 2) Agencies without Explicit Authority but which may Bond for Sludge Projects on a Case by Case basis

B. PRIVATE FINANCING

- 1. Types of Privately Financed Arrangements
 - a. Industrial Development Bonds
 - 1) New Jersey Economic Development Authority IDB's
 - 2) Other IDB's
 - b. Guarantee and/or Direct Loans through the N.J. Economic Development Authority
- 2. Rules, Regulations and Statutes Affecting Private Financing of Sludge Projects
 - a. Tax Laws
 - 1) Investment Tax Credits
 - 2) Energy Tax Credits
 - 3) Accelerated Depreciation Deductions
 - 4) Tax Exemptions
 - 5) Deductability of Interest Expense
 - b. Board of Public Utilities Laws

C. MIXED PRIVATE AND PUBLIC FINANCING

- 1. Types of Financial Arrangements which Mix Public and Private Monies
 - a. Leaseback
 - b. Turnkey
 - c. Sale with Operations in Whole or in Part by the Private Sector
- 2. Rules, Regulations and Statutes Affecting Public/Private Mixtures for Financing Sludge Facilities

IV. USER COSTS

- A. SUMMATION OF ALL FACILITY COSTS
- B. DETERMINATION OF BENEFICIARIES
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- I. FINDINGS
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 - a. Criteria for Designation of Lead Agency
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 - 3. Development of District Sludge Management Plans
 - a. Standards, Goals and Criteria
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- III. PHASE II STATE SLUDGE MANAGEMENT PLANNING AND PROGRAM DEVELOPMENT
 - A. REVIEW AND GUIDANCE FOR DISTRICT PLANNING
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- E. PRIORITIZATION OF SLUDGE MANAGEMENT PROBLEMS
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- H. DEVELOPMENT OF WASTE FLOW RULES
- I. NEW TECHNOLOGY REVIEW
- J. EVALUATION OF PRETREATMENT AND INDUSTRIAL SLUDGE MANAGEMENT ISSUES
- K. CONTINUATION OF THE SLUDGE TASK FORCE

IV. CONCLUSION

FIGURE 1

SLUDGE MANAGEMENT RESPONSIBILITIES

AFTER SSMP ADOPTION

State
S.W. Districts per SSMP

State with 201 and
S.W. District Consistency

S.W. District or
Approved District Designee

State
County Board of Health

BEFORE SSMP ADOPTION

201 Agency
Sludge Generator
Other Applicant

State with
201 Consistency

201 Agency
Sludge Generator
Other Applicant

State
County Board of Health

PLANNING

PERMITS/APPROVALS

IMPLEMENTATION

ENFORCEMENT

Summary of Existing Sludge Disposal Modes (Dry lbs/Day)
Manigault

County	Short Term On-Site	Long Term On-Site	Incineration (as customer)	Incineration (owner)	Land Application	Ocean Disposal	Out-of- State	Undetermined	County Total
Atlantic	0	0	1,750	30,000	5,061	0	101	842	37,754
Bergen	1,646	0	16,903	11,728	0	143,853	4,147	263	178,540
Burlington	909	5,219	3,292	0	32,598	0	28,157	3,206	73,381
Camden	6,274	916	0	6,581	100,796	0	0	6,382	120,949
Cape May	1,150	0	182	0	19,236	0	0	103	20,671
Cumberland	6,208	0	0	0	11,100	0	0	1,066	18,374
Essex	0	0	8,986	0	0	573,300	12,226	1,137	595,649
Gloucester	59	0	0	0	32,539	0	0	173	32,771
Hudson	59,795	8,930	5,664	0	0	34	19,396	18,125	111,944
Hunterdon	0	0	3,183	0	3,274	16	36	60	6,569
Mercer	0	25,156	506	33,882	3,910	0	36,983	0	100,437
Middlesex	33,133	32	1,299	0	145	231,589	24,964	1,085	292,247
Monmouth	4,591	1,270	33,308	18,720	42,460	0	13,068	4,925	118,342
Morris	0	799	61,998	38,365	4,007	0	6,261	736	112,166
Ocean	0	0	0	0	29,423	0	0	162	29,585
Passaic	0	0	12,679	11,693	39	0	572	26	25,009
Salem	1,517	0	55	0	3,480	0	0	0	5,052
Somerset	0	0	7,590	30,453	8,798	46	0	110	469
Sussex	0	0	83	0	15,060	17	29	90	15,278
Union	0	0	2,588	0	0	356,138	0	0	358,726
Warren	0	0	8,996	0	1,015	0	4,057	13	14,081
TOTAL	115,282	42,322	169,062	181,422	312,941	1,304,993	149,997	38,504	2,314,522
% TOTAL	5.0%	1.8%	7.3%	7.9%	13.5%	56.3%	6.5%	1.7%	100%

NOTE: 1980 N.J. population = 7,364,823 therefore existing sludge production per capita equals 2,314,522 ÷ 7,364,823 or .314 lbs/capita/day

COMPARISON OF CROPLAND ACREAGE* TO
TOTAL ACREAGE REQUIRED
FOR LAND APPLICATION OF
EXISTING CLASS A & B LAND APPLICABLE SLUDGE

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County	# Farms	Cropland ^a Acreage	Total Estimated ^b Class A & B Acres Needed	Surplus/ Deficit of Cropland Acreage
Atlantic	404	18,162	116	+18,046
Bergen	144	1,608	13,682	-12,074
Burlington	717	81,645	2,380	+79,265
Camden	160	8,524	3,948	+ 4,576
Cape May	108	9,254	631	+ 8,623
Cumberland	610	62,110	628	+61,482
Essex	38	1,173	7,964	- 6,791
Gloucester	701	56,458	2,437	+54,021
Hudson	--	--	192	- 192
Hunterdon	1104	92,569	957	+91,612
Mercoer	297	35,190	1,932	+33,258
Middlesex	268	27,321	781	+26,540
Monmouth	732	56,281	4,487	+51,794
Morris	355	19,043	2,653	+16,390
Ocean	173	5,998	10,259	- 4,261
Passaic	49	495	322	+ 173
Salem	613	82,001	146	+81,855
Somerset	391	39,136	244	+38,892
Sussex	539	47,516	21	+47,495
Union	35	393	4,040	- 3,647
Warren	544	63,467	405	+63,062
Totals		708,344	58,225	+650,119 ^c

* New Jersey Farm Census

a. Cropland Acreage has not been evaluated for suitability for sludge farming.

b. Based on average concentrations of 5 metals; other parameters may override.

c. Statewide, New Jersey has 650,119 acres of cropland in excess of what is necessary to apply existing Class A & B Land Applicable Sludges.

TABLE 4

STATUS OF DESIGNATED POTW's PRETREATMENT PROGRAMS

County	POTW	Industrial ^a Waste Survey	Draft Legal ^b Authority	Final Due	Comments
Atlantic:	None				
Bergen:	Bergen County U.A.	S	S	2/84	
	N.W. Bergen Co. S.A.	S	1/84	3/84	
	Passaic Valley S.C.	S	S	*	
Burlington:	Mount Holly S.A.	S		9/84	Awaiting State Guidance
Camden:	Camden County H.U.A.	S	S	S	Review indicates institutional arrangements may be unacceptable as submitted
Cape May:	None				
Cumberland:	None				
Essex:	Essex-Union Joint Meeting	S		S	Under Review
	Passaic Valley S.C. ^g	S	S	*	
	Two Bridges	S	S	S	Under Review
Gloucester:	Gloucester County U.A.	S	S	*	
Hudson:	Hudson County U.A.	S		?	Final Report submitted but future status of H.C.U.A. implementation must be resolved with other Hudson County POTW's
	Passaic Valley S.C. ^g	S	S	*	
Hunterdon:	None				
Mercer:	Erving-Lawrence S.A.	S	S	S	Approval pending submission of final rules and regulations
	Hamilton Twp.	S	S	S	Approval pending submission of documentation on field quality assurances and financial resources
	Stony Brook Reg. S.A.	S	S	*	

	City of Trenton	S	S	S	Awaiting submission of attorney's statement on legal authorities
Middlesex:	Middlesex County U.A. ^a	S	S	12/83	
	Rahway Valley S.A. ^a	S	S	*	
Monmouth:	Bayshore Regional S.A.	S	S	1/84	
	Ocean County U.A. ^a	S	S	*	
Morris:	Hanover S.A.	S	S	12/83	
	Morris Township	S	S	11/83	
	Rockaway Valley Regional S.A.	S	S	11/83	
	Two Bridges ^a	S	S	S	Under Review
Ocean:	Ocean County U.A. ^a	S	S	*	
Passaic:	Passaic Valley S.C. ^a	S	S	*	
	Totowa-West Paterson S.A.	S		9/84	Awaiting State Guidance
	Wayne Township	S		9/84	
Salem:	None				
Somerset:	Middlesex County U.A.	S	S	12/83	
	Somerset Raritan Valley S.A.	S	S	12/83	
Sussex:	None				
Union:	Essex-Union Joint Meeting ^a	S		S	Under Review
	Linden-Roselle S.A.	S	S	12/83	
	Rahway Valley S.A.	S	S	*	
Warren:	None				

- Notes: a. Survey identifies and locates all industrial discharges in the planning area whether or not they discharge to POTW. Both quality and quantity of various types of wastes are identified.
- b. A statement of the legal authorities of the POTW for pretreatment requirements and a draft of ordinance provisions
- S. Submitted
- * Approved
- ^a Planning Area extends beyond County boundary

TABLE 5

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STATUS OF 201 SFTAGE DISPOSAL PLANNING

County	Facility	Planning	Design	Construction	On-Line
Atlantic:	Atlantic County M.U.A.	X	X		X
	Buena Borough M.U.A.				X*
Bergen:	N.W. Bergen S.A.	X	X		
	Ridgewood Village ^a	X	X		X*
Burlington:	Delran Sewerage Treatment Auth.	Addressed by Burlington County Planning			
	Burlington Twp. Central STP	Addressed by Burlington County Planning			
	Pemberton Twp. M.U.A.	Addressed by Burlington County Planning			
	Florence Twp. STP	Addressed by Burlington County Planning			
	Mount Holly STP ^b	X	X		
	Burlington County Bd. of Freeholders	X			
Cape May:	Lower Twp. M.U.A.	Addressed by Cape May MUA Ocean City Plant			
	Cape May County M.U.A./Ocean City ^b			X	X
Camden:	Collingswood STP	X	X		
	Camden County M.U.A. ^b	X			X*
	Cherry Hill ^a				
Cumberland:	Cumberland County U.A.				X*
	Millville STP ^a				
Essex:	Livingston Twp. STP ^a				
	Essex-Union Joint Meeting ^a				
	Rahway Valley S.A. ^a				
	Two Bridges S.A.	X	X		X*
Gloucester:	Gloucester County U.A. ^b			X	X
	Logan Twp. STP ^a				
Hudson:	Secaucus Town STP				X*
Hunterdon:	Lambertville S.A. ^b	X	X	X	X
	Readington-Lebanon S.A. ^b	X	X	X	X
Mercer:	Stony Brook Regional S.A.	X	X	X	X
	East Windsor M.U.A.	X			
	Ewing-Lawrence S.A. ^a				
Middlesex:	Middlesex County U.A. ^a	X	X		X*
	Monroe Twp. M.U.A. ^a				
	Rahway Valley S.A. ^a				
	East Windsor M.U.A. ^a	X			
Monmouth:	Northeast Monmouth Regional S.A.	Addressed by Monmouth County Planning			
	Western Monmouth U.A.	Addressed by Monmouth County Planning			

County	Facility	Planning	Design	Construction	On-Line
Monmouth: (Cont'd)	Southern Monmouth S.A.	Addressed by Monmouth County Planning			
	Neptune Twp. STP	Addressed by Monmouth County Planning			
	Monmouth County Bd. of Freeholders ^b	X			
	East Windsor M.U.A. ^c	X			
	Middletown Twp. S.A.	X	X	X	X
Morris:	Two Bridges S.A.	X	X		X*
	Parsippany-Troy Mills	X			X*
	Hanover Twp. S.A. ^a				
	Madison-Chatham Joint Meeting ^a				
Ocean:	Ocean County U.A.	X	X	X	X
Passaic:	Pompton Lakes Borough M.U.A.	X			
Salem:	None				
Somerset:	Middlesex County U.A. ^c	X	X		X*
	Somerset Raritan Valley S.A.	X	X		X*
Sussex:	Sussex County M.U.A. ^b	X	X	X	
Union:	Essex-Union Joint Meeting ^a				
Warren:	Phillipsburg STP				X*
	Hackettstown M.U.A.	X			

NOTES: a. Designated in 1980 EPA Finding of No Significant Impact but failed to proceed through the 201 Grant Program
 b. Not designated by 1980 EPA Finding of No Significant Impact
 * Receiving Septage without treatment plant modifications
 # Planning Area extends across county boundaries

TABLE 6
STATUS OF
201 SLUDGE PLANS FOR DISPOSAL FACILITIES

<u>201 PLANNING AGENCY</u>	<u>SELECTED PLAN</u>	<u>PLANNING</u>	<u>DESIGN</u>	<u>CONSTRUCTION</u>	<u>ON-LINE</u>
Atlantic County:					
Atlantic County S.A.	Composting and Incineration	X*			
Bergen County:					
Bergen County U.A.	Incineration	X*			
Northwest Bergen S.A.	Incineration	X*			
Passaic Valley S.C.	Incineration	X*			
Burlington County:					
Mount Holly S.A.	Undetermined	X			
Burlington County Health Dept.	Undetermined	X			
Camden County:					
Camden County M.U.A. (Interim Pilot)	Composting	X	X	X	X
Camden County M.U.A. (Ultimate)	Co-Incineration	X*			
Cape May County:					
Cape May M.U.A.	Mechanical Composting	X	X	X	
Cumberland County:					
None					
Essex County:					
Passaic Valley S.C.	Incineration	X*			
Essex-Union Joint Meeting	Incineration	X*			
Two Bridges S.A.	Incineration	X	X	X	X
Gloucester County:					
Gloucester County S.A.	Incineration	X	X	X	X ^a .
Gloucester County S.A.	Composting	X			
Hudson County:					
Hudson County S.A.	Undetermined	X			
Passaic Valley S.C.	Incineration	X*			

201 PLANNING AGENCY	SELECTED PLAN	PLANNING	DESIGN	CONSTRUCTION	ON-LINE
Hunterdon County:					
Readington-Lebanon S.A.	Land Application	X	X	X	X
Lambertville S.A.	Land Application	X	X	X	X
Milford Boro.	Undetermined	X			
Mercer County:					
Stony Brook Regional S.A.	Incineration	X	X	X	X
Mercer County Improvement Authority	Wet Air Oxidation	X	X		
East Windsor M.U.A.	Land Application	X	X	X	X
Middlesex County:					
East Windsor M.U.A.	Land Application	X	X	X	X
Rahway Valley S.A.	Incineration	X*			
Middlesex County U.A.	Incineration	X*			
Monmouth County:					
East Windsor M.U.A.	Land Application	X	X	X	X
Northeast Monmouth Regional S.A.	Composting	X*			
Middletown Township S.A.	Composting	X	X	X	X
Allentown Borough S.A.	Undetermined	X			
Western Monmouth U.A.	Land Application	X			
Long Branch S.A.	Undetermined	X			
Bayshore Regional S.A.	Incineration	X	X	X	X
Ocean County U.A.	Undetermined	X			
Morris County:					
Parsippany-Troy Hills Twp.	Incineration	X	X	X	X
Two Bridges S.A.	Incineration	X	X	X	X
Rockaway Valley Regional S.A.	Undetermined	X			
Ocean County:					
Ocean County U.A.	Undetermined	X			
Passaic County:					
Passaic Valley S.C.	Incineration	X*			
Wayne Twp.	Incineration	X	X	X	X

<u>201 PLANNING AGENCY</u>	<u>SELECTED PLAN</u>	<u>PLANNING</u>	<u>DESIGN</u>	<u>CONSTRUCTION</u>	<u>ON-LINE</u>
Salem County:					
None					
Somerset County:					
Middlesex County U.A. ⁰	Incineration	X*			
Sussex County:					
Sussex County M.U.A.	Composting	X	X	X	
Union County:					
Essex-Union Joint Meeting	Incineration	X*			
Rahway Valley S.A. ⁰	Incineration	X*			
Warren County:					
Pequest River S.A.	Composting	X		X	X ^a

NOTES:

- ⁰ - Planning Area in more than one county
- * - Plan complete but not implementable
- ^a - Construction complete but not operational

TABLE 7

STATUS OF DISTRICT SLUDGE MANAGEMENT PLANNING

DISTRICT	PLANNING IN PROGRESS	PLANNING COMPLETE	DISTRICT ADOPTION	SUBMITTED TO STATE	STATE ADOPTION	201 CONSISTENCY	201 CROSS- ADOPTION
Atlantic County							
Bergen County							
Burlington County	X					X	
Camden County							
Cape May County		X				X	
Cumberland County							
Essex County							
Hackensack Meadowlands D.C.							
Hudson County							
Hunterdon County		X		X			D
Mercer County							
Middlesex County							
Norfolk County							
Norris County							
Ocean County							
Passaic County							
Salem County							
Somerset County							

DISTRICT	PLANNING IN PROGRESS	PLANNING COMPLETE	DISTRICT ADOPTION	SUBMITTED TO STATE	STATE ADOPTION	201 CONSISTENCY	201 CROSS- ADOPTION
Sussex County							
Union County							
Warren County		X	X	X			D

X - Indicates activity is accomplished
D - Indicates action deferred until adoption of the Statewide Sludge Management Plan

THE ROLE OF THE OCEAN AS A MUNICIPAL SLUDGE MANAGEMENT OPTION

Testimony before the
Subcommittee on Environmental Pollution
Committee on Environment and Public Works

United States Senate
Washington, D.C.

July 30, 1985

by

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Conference of Coastal Agencies
A Committee of
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CCA's members represent many of this country's major metropolitan areas. From the Northeast, our members are: The South Essex Sewerage District, Massachusetts, New York City's Department of Environmental Protection, Nassau and Westchester Counties, New York, and Middlesex County Utilities Authority, New Jersey. In the Middle Atlantic area, we have the City of Baltimore, Maryland, and Hampton Roads Sanitation District, Virginia. Five California agencies are CCA members: San Diego, Encina, Orange County, the City of Los Angeles, and the City and County of San Francisco. In the Northwest we count two more members, Tacoma, Washington, and Anchorage, Alaska.

I - CCA'S OBJECTIVES

Our member agencies are local government agencies which were established for the prime purpose of protecting public health and the environment. Furthermore, we are public agencies spending public dollars, and we have an obligation to seek the most cost effective methods to obtain the levels of protection of human health and the environment that Congress and our state legislatures decree. In the past decade, in our efforts to find the most efficient means of meeting mandated environmental goals, we have experienced on many occasions conflicts and inconsistencies which have arisen between environmental laws that are written with the purpose of protecting individual media: air, land, surface water, ground water, or the oceans.

In general, each of the various specific environmental laws which were enacted during the 1970's focused primarily on one area of environmental concern resulting in a medium by medium approach to environmental regulation. For example, the Clean Water Act focused primarily on surface waters, the Clean Air Act on protection of the air that we breathe, and the Marine Protection Research and Sanctuaries Act on protection of the oceans. Moreover, under the Congressional Committee system, no single Committee has broad enough jurisdiction to look at waste management as a whole. In recent years both the National Academy of Sciences and the National Advisory Committee on Oceans and Atmosphere have criticized the medium by medium approach to waste management in general and to municipal sludge management in particular. Both of these 'blue ribbon' panels strongly recommended that a new approach be implemented that would result in the treatment and placement of waste in the medium and manner which minimizes the risk to human health and impact on the environment. The Conference of Coastal Agencies strongly supports the recommendations of these two Committees since among our members we have municipalities wise and experienced with the problems and potential of utilization and disposal of municipal sludge in each of the various media that are available.

The scientific community has learned a great deal in the past few years concerning the effects of municipal sludge and other materials introduced into the ocean. A decade ago we had little information and many fears that introduction of municipal sludge and similar materials into the ocean might lead to detrimental and severe effects. It has now become clear that adverse impacts of municipal sludge in the ocean, if any, are extremely limited and that there is a strong potential that

municipal sludge, properly applied to the ocean, can be used in a beneficial way much as municipal sludge can be used beneficially when applied to land in the appropriate manner.

Despite substantial improvements in our knowledge of the effects of municipal sludge in the ocean that have taken place during the past several years, certain gaps do continue to exist in our knowledge, particularly with regard to information necessary for us to utilize municipal sludge in the ocean in the most beneficial manner. CCA is totally committed to improving our scientific data base concerning ocean application of municipal sludge. To this end, we have been working closely with the Federal agencies responsible for the research and monitoring efforts that are necessary to improve our understanding.

It is CCA's position that municipal sludge should be managed in the manner that will minimize environmental harm and risks to human health and which can be accomplished within rational economic limits. It is not possible to single out any medium whether it be the atmosphere, the ocean or the land, and to state flatly that the human health and environmental risks associated with municipal sludge management in that medium will always be greater than any other alternative. In considering the matter of municipal sludge management, it is necessary to recognize a concept to which we have already referred: there are potential benefits from the wise use of this material both on the land and in the oceans. Up to this time, we have considered municipal sludge management through placement in the ocean to be strictly a matter of 'disposal'. However, in many sections of the country we are already deriving benefits from municipal sludge's ability to enhance productivity on the land. If the wise and prudent use of the nutrients in municipal sludge produces benefits on land, benefits to our marine life can also result from the prudent application of municipal sludge to the ocean. CCA believes that the beneficial use of municipal sludge through appropriate application to the oceans is a goal towards which we must work, since in many parts of our nation such beneficial use may provide greater benefit to our society than any other practicable management alternative. Several studies of the scientific knowledge of the effects of municipal sludge in the ocean support the conclusion that beneficial application of municipal sludge and treated municipal wastewater effluents to the ocean is possible under appropriate conditions. Today we have attached to our statement two scientific papers which present scientific analyses to support that conclusion and ask that these papers be included as part of the record of this hearing.

Regrettably, the general public sees sewage in negative terms. When Congress passed the Marine Protection Research and Sanctuaries Act in 1972 and again when the statute was amended by the Congress in 1977, this body properly prohibited the placement of municipal sludge in the ocean if it would 'unreasonably degrade or endanger' the environment or human health. This language specifically recognized that there would be some municipal sludges and some locations where no such unreasonable degradation or danger would result. We believe that this determination is equally applicable today, but that we must move beyond the limited perspective that the oceans provide no more than an acceptable disposal alternative for municipal sludges, and work toward the day when municipal sludge is applied beneficially to the oceans and this positive

consequence is widely recognized.

Each region of the country has its own set of unique problems and circumstances. What is the best municipal sludge management plan for St. Louis may not work at all in New York City and vice versa. The type of land available, the existing land use patterns, and existing air pollution problems, along with the underlying physical processes governing air and water circulation, have to be considered in determining which municipal sludge management option is the best in any given local situation. In addition the quality of municipal sludge is not uniform. Obviously those municipalities with greater industrial input into their municipal treatment systems have municipal sludges that contain higher levels of synthetic organic chemicals and heavy metals. These agencies are already required by the Clean Water Act to develop pre-treatment programs which are progressively reducing these levels to acceptable limits. Although implementation of pre-treatment programs can be difficult and expensive, we are totally committed to the success of such programs and we are making substantial progress. Many of our member municipalities have seen dramatic results in the reduction of heavy metals in municipal sludges as a result of our work with the industrial companies that operate in our areas.

While industrial pre-treatment is of fundamental importance in controlling the presence of undesirable elements in our municipal wastewater treatment systems, even the fullest application of the pre-treatment program will not totally eliminate these materials. For example, during the past several years, Orange County, California, has been able to substantially reduce the concentration of most metals in their municipal sludges, but the concentration of silver has risen. After much study, the County could only conclude that the rise in the concentration of silver has taken place because of the increased number of individuals who are becoming active in photographic development and processing in their homes. This example is just one of many where products used in the household and activities performed outside of the industrial sector can contribute substantial quantities of contaminants to our municipal wastewater treatment systems. We believe that, in the future if we are to progress beyond the industrial pre-treatment program in minimizing contaminant concentrations in our municipal sludges, it will be necessary to control the composition and use of the huge variety of products sold in the market place. At least one of our member agencies has already given itself the authority to control the use of certain household products that may be shown to be introducing substantial amounts of contaminants to the wastewater system. However, we believe that little or no progress can be made in implementing changes in the use of contaminant-rich commodities in the market place until this problem is addressed at a Federal level. We are strongly committed to taking whatever steps are necessary to improve the quality of our municipal sludges so that no matter how they are used, this use can be beneficial without the concern that contaminants which are present in trace concentrations may negate some of that benefit.

II. THE PRESENT LEGISLATIVE AND ADMINISTRATIVE SITUATION

For the past several years, the Congress has failed to reauthorize Title I of the Marine Protection Research and Sanctuaries Act even though the

House of Representatives has approved bills which would have done so. In our testimony before House Committees in each of the last four years, we have opposed major changes to the Act, but strongly supported those proposals which would increase the quality of research on regional marine pollution problems and facilitate the use of multi-media management studies to support decisions concerning options for the management of municipal sludge. This year, a reauthorization bill, HR1957, has been passed by the House. Another bill, S824, has also been introduced for consideration by this Committee which would make major changes in the Act that would substantially affect municipal wastewater treatment authorities who are now managing their municipal sludge in the ocean, or who might consider this as one option to be studied in comparison to other available options for the future.

The Environmental Protection Agency (EPA) currently has several on-going activities which relate to the matters under consideration by this Committee. EPA has indicated that it will soon move to promulgate revised Ocean Dumping regulations. We hope that EPA intends that the process leading to the new regulations will be an open process wherein technical experts from both inside and outside the agency will be afforded the opportunity to review and comment on the concepts and procedures incorporated within the new regulatory scheme, before final rulemaking begins. We believe this open process is appropriate and necessary and look forward to working with EPA on this matter. CCA believes that any major changes in the statutory authority that might be adopted at this time could well result in further delay of this already much delayed process.

It makes sense to us that the Congress should enact a reauthorization of the Act without substantive changes. However, we certainly support amendments at this time that would improve the quality of our research and monitoring, and amendments that would facilitate the use of the multi-media management approach to waste management decisions and enhance our knowledge of the potential for beneficial use of municipal sludge in the ocean or for aquaculture. CCA has already made available to this Committee an alternative set of proposed amendments to the Act which include many of the provisions and concepts contained in HR1957 and S824.

III. APPLICATION AND USER FEES

Proposed amendments under consideration by this Committee contain provisions for fees which would have to be paid by municipalities using barges to manage their municipal sludge in the ocean. These vary substantially in their scope and concept and may be categorized as three distinctly different proposals. First, a simple application fee to be levied from a permit applicant in an amount sufficient to reimburse the 'reasonable administrative costs' incurred by the EPA or the Corps of Engineers in processing the permit. Second, a similar proposal that an additional fee should be levied by the Administrator to reimburse Federal agencies for costs incurred in several activities concerned with obtaining the assessment and data necessary to properly administer the permit program. These activities include site designation, issuance of permits, compliance monitoring, and assessment of the effects of municipal sludge in the ocean. These two fees are included in

provisions of HR1957. The third proposed fee provision considered and rejected by the House was a punitive fee provision to be levied from municipalities utilizing the ocean for disposal of their municipal sludges from barges.

CCA considers that these three fee provisions are substantively different in their approach and intent, and we would, therefore, like to comment on them individually.

Application Fee

The application fee which would be required by HR1957 is a reasonable fee which would reimburse the EPA for those costs that they actually incur in processing the permit application itself. These costs will undoubtedly be both moderate and relatively easy to separate out and define. Therefore, CCA believes this is a workable fee provision which is unlikely to lead to disagreement as to those items that are covered and that will reimburse EPA for legitimate costs incurred by the Agency in reviewing each specific permit application. CCA supported this provision in each of the past two years and we see no reason to change our support of this application fee at this time. However, we would like to reiterate that our support for this provision rests upon our belief that the costs of processing an application are readily identified and assignable to individual permittees, and that these costs represent only the incremental costs incurred by EPA in processing each additional permit. CCA would also like to reiterate that we believe this fee should be applied to all permittees regardless of the material involved.

Cost Reimbursement Fee

HR1957 proposes fees which go considerably beyond the permit application fee. These fees would be levied as a condition of issuance of a permit and would be intended to reimburse EPA for costs incurred in undertaking activities directly associated with the issuance of permits, site designation, the undertaking of measures to determine compliance with permit terms, the assessment of the direct effects of permitted activities, and surveillance and enforcement activities undertaken by the Coast Guard.

Our members generally believe that user fees to reimburse the Federal government for those costs directly incurred by the Federal government with regard to a particular permit may be reasonable. However, many questions remain concerning which activities of the EPA, NOAA and the Coast Guard are indeed directly caused by and necessary because of a particular permit, or group of permits for a particular ocean site. All permittees are currently required to perform extensive monitoring programs themselves, and our members believe that this is the most appropriate approach to compliance monitoring. However, we do recognize that there may be a need for the Federal government to perform limited additional monitoring at a given ocean site to verify results obtained by the permittees. The fee provision outlined in HR1957 provides no guidance as to what should be the appropriate role of the EPA. Under these circumstances we cannot support this fee provision

since we do not feel it is appropriate to remove compliance monitoring responsibility from the permittee and place all of this responsibility with EPA.

We are concerned that in these days of shrinking agency budgets there may be a temptation for the Federal agencies to supplement their budgets by assuming, probably at greater costs, those monitoring activities that are now efficiently and effectively performed by the permittees. This same concern is even more serious as it relates to the costs incurred in undertaking site designation activities and the assessment of any direct effects of utilizing an ocean site. We believe that the lack of specificity in the fee proposal regarding what such activities should entail would ensure that there would be conflict between Federal agencies and permittees with regard to the definition of which activities were appropriate and necessary for the Federal agency to perform with regard to these items.

We would like to provide an example of our concerns. Recently an academic researcher has identified a vast area of the North Atlantic Ocean within which it is hypothesized that the probability may be above zero that wastes introduced at the North Atlantic Deepwater Municipal Sludge Dump Site (DMSDS) will occur at some concentration and at some time. This researcher acknowledged that, although there was a finite probability of occurrence of some vanishingly small concentration of waste at any location within this area, the possibility of any effect due to that waste was exceedingly small in most of the area. In most of the area, wastes would only occur periodically for very short periods of time and at extreme dilutions such that no effects would take place. An EPA-issued draft monitoring plan for the DMSDS has interpreted this vast geographical area to be a 'potential area of impact' and strongly suggests that assessment of the direct effects of utilizing the DMSDS should include measurements made throughout this enormous area. We believe there is absolutely no technical justification for the proposition that direct effects are even possible within most of this area and are afraid that adoption of this purely hypothetical concept of a potential area of impact may represent the first attempt to ensure that funding for Federal research activities in this vast area should be financed by citizens of our wastewater treatment areas. While Federal funds should continue for research in the ocean, including this area, we do not regard it as appropriate that research programs throughout this area be funded through a user fee since most of the research activities have, and would continue to have, absolutely no relevance to an assessment of the direct effects of use of the DMSDS.

Last year and the preceding year, CCA suggested that, if this special type of fee provision were to be adopted, appropriate safeguards must be established within the language of the statutory amendments that would ensure that only the direct costs incurred by EPA with regard to particular permit activities would be included within the fee. We suggested then, and would suggest again, that it may be appropriate to establish a mechanism with regard to this fee provision whereby disputes between the permittees and the Federal agency with regard to which scientific activities are necessary to a particular permit could be mediated by a special Committee established by a scientific authority such as the National Academy of Sciences or the National Science

Foundation. Such a Committee would consist of experts in the field of ocean impact assessment. We realize that this mechanism may not be easy to establish and, therefore, would suggest that, in lieu of such a mediation mechanism, such a special fee provision must be limited to avoid conflict. We would suggest that this fee could be limited by statute to a maximum of \$1 per dry ton of permitted material. If such a fee were levied on the municipal sludge permittees, the sum of money generated from this single site would represent approximately 5% of the Federal authorization level for all activities under Title I of the MPRSA. Considering that only one of the more than 100 sites administered under this Title is a site for disposal of municipal sludge, the amount of money generated by such a fee should be more than adequate.

In summary with regard to this special fee, CCA is not totally opposed to the concept of cost reimbursement appropriate to individual permit applications. However, we believe the provisions, as drafted in HR1957, suffer from major problems and require substantial amendment before they would become acceptable. We would also like to point out that we do not support such a special fee unless it is applied to all permittees regardless of the nature of the material involved.

Punitive Fee

The House Merchant Marine and Fisheries Committee considered and rejected a provision that would impose a punitive fee upon permittees disposing municipal sludge in the ocean. Part of this fee would be returned to the municipality for use in developing land-based alternatives to ocean disposal. CCA believes there is absolutely no justification for establishing a punitive user fee or for the presumption on which the rationale for this fee is based that land-based alternatives, no matter how environmentally damaging, are preferable to ocean management alternatives for municipal sludge. While some of the purposes for which a punitive fee would be used are important activities that must be undertaken, we believe that these activities are more properly funded through other mechanisms. Additionally, we see no reason why a large percentage of such a fee should be wasted in developing and administering the fee system itself, since this would simply reduce the sums of money available for appropriate and necessary pre-treatment improvements and studies of municipal sludge management procedures. Moreover, CCA believes that it is totally unjustified for the Federal government to require municipalities to generate municipal sludge in order to protect human health and the environment, and then charge a fee for the safe disposition of that material in the ocean. It is important to point out here that the Federal Government does not charge a fee such as this for use of a commonly held resource for the disposition of any other waste. Certainly, those industries and power producers utilizing the atmosphere do not pay a fee for use of that medium. Those using deep well injection also pay no such fee.

We have heard the argument that this type of fee will correct inequities between those municipalities lucky enough to have an ocean available and those who must use other media which generally are thought to involve greater expense. However, this argument has no more merit than an argument that industries and home-owners locating in the sunbelt should

pay higher taxes, since they are lucky enough to have a climate which imposes lower heating costs upon them.

IV. PROPOSED CHANGES IN PERMIT APPLICATION REQUIREMENTS

The bills under consideration by this Committee include a variety of provisions which would make both minor and major changes in the requirements that would have to be met before a permit could be issued. CCA would like to reiterate our position that the Act does not need major amendment at this time. However, in the following paragraphs, we will respond in detail to each of the proposed changes in permit application requirements.

Definition of Municipal Sludge

Both S824 and HR1957 contain provisions that would change the definition of 'sewage sludge' within the Act. The name 'sewage sludge' would be changed to 'municipal sludge' among the list of materials to which the Act applies. In addition, a definition of municipal sludge would be added to the Act. CCA would like to support this change, since we believe it reflects an awareness that there is an adverse public reaction to the word sewage that unjustifiably extends to municipal sludges when these are prefaced by the word 'sewage.' We believe the term 'municipal sludge,' while still retaining some negative connotations, more closely conveys an understanding of the harmless nature of this material. However, we would like to point out that the definition of municipal sludge provided in HR1957 and S824 is so broad as to encompass effluents from our treatment plants, in addition to municipal sludges themselves. It would be appropriate to make it clear that this definition does not encompass effluents.

We note that neither S824 nor HR1957 would change the term 'sewage sludge' to the term 'municipal sludge' throughout the Act. The term 'sewage sludge' would still remain within Section 101 of the Act and within that section this term would continue to have its own definition. Since the term 'sewage sludge' in Section 101 is used to describe only those municipal sludges which may 'unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, and economic potentialities,' this dual definition of sludges generated by municipal treatment plants may well be useful, and could reduce the potential for confusion in the public's mind that all municipal wastewater treatment sludges are prohibited from ocean disposal through the provisions of Section 101. Nevertheless we believe this distinction may need to be made even more clear and would suggest that Section 101 be amended such that the prohibition would apply to 'harmful sewage sludge' and that the 'unreasonable degradation' definition of this material be altered to also refer to harmful sewage sludge.

Proposed Changes in the Unreasonable Degradation Standard and a New Deadline.

HR1957 provides an entirely new term 'harmful municipal sludge' and establishes a prohibition on the ocean disposal of such material within

18 months after enactment. We find this provision to be most troublesome and totally unjustified. The new provision defines harmful municipal sludge as any municipal sludge which when ocean dumped 'may be harmful' to human health or the environment. The phrase 'may be harmful' would replace the 'unreasonable degradation' standard of the current statute. We believe that this change runs contrary to the recommendations of the National Academy of Sciences, National Advisory Committee for Oceans and Atmosphere, and the Federal agencies, which state that waste management decisions should be made through a consideration of the potential impacts in all media where the waste may be managed. Adoption of this amendment proposed by HR1957 would be a substantial step back into the 'dark-ages' of environmental regulation, when wastes were disposed in the least regulated media regardless of whether management in that medium adequately protected or minimized risks to human health or the environment.

HR1957 does provide guidance as to how the term 'may be harmful' is to be interpreted. Harmful sludges are those which do not pass EPA's environmental impact criteria. Applying the environmental impact criteria of the regulations as the sole basis for a determination of whether a municipal sludge may be harmful is, on its face, a logical and reasonable approach. Indeed, we believe that most, if not all, of the municipal sludges generated by our member municipalities fully comply with these environmental impact criteria. However, the environmental impact criteria consider only potential impacts on the ocean. It is certainly conceivable that in some instances, municipal sludges which do not fully comply with these criteria may be more appropriate for ocean management than management in other media where they would pose greater risks to human health and the environment. The requirement for compliance with the environmental impact criteria, combined with the 'harmful' standard, would prevent management of municipal sludges in the manner that provides the greater protection for human health and the environment. Simply stated, if adopted, this provision could mean that in certain cases municipal sludges would be managed on the land or into the atmosphere, where to do so under specific local conditions would create an increased risk to human health and/or more serious damaging effects upon the environment when compared to managing them in the ocean.

HR1957 would impose a new deadline beyond which ocean management of 'harmful municipal sludge' would be prohibited. CCA feels that such a new deadline is unnecessary as we are sure that none of our members would propose to initiate or continue ocean management of their municipal sludges if a multi-media assessment of their available options did not show ocean management to be the environmentally preferable alternative for their particular situation. In addition, we would also like to point out that all of those municipal sludges currently being managed in the ocean which have undergone the complete suite of bio-assay and bio-accumulation testing necessary to assess their compliance with the environmental impact criteria of the EPA regulations do, in fact, fully and totally comply with those criteria.

Pretreatment and State Involvement in Planning

HR1957 would impose two new requirements for ocean management permits

which were granted for the disposal of municipal sludge. These are: first, that the authority operating the plant at which the municipal sludge is generated should be in compliance with the pre-treatment requirements of the Federal Water Pollution Control Act and, second, that the EPA Administrator and the Governor of the State in which the authority is located must find that a 'suitable' land-based alternative to ocean management of the municipal sludge is not available. The first of these provisions is also included in S824 and is one that we can strongly support in principle, provided that the pre-treatment requirements of the Federal Water Pollution Control Act are not altered in a manner which makes it impossible for our members to comply. As mentioned earlier in this statement, our members are strongly committed to the implementation of an industrial pre-treatment program, and we believe that, while several of our members are as yet only in the early stages of implementing their programs, the requirement set by HR1957 and S824 is one that we can and should meet. Both the State of New Jersey and the City of New York have testified before the House that an alternative formulation of this provision which combines a deadline for compliance with pre-treatment provisions and a system of fines for non-compliance is preferable to the flat prohibition on issuance of ocean disposal permits to non-complying applicants. CCA strongly endorses this proposed alternative approach.

The second provision of HR1957, which would apply after December 31, 1986, is a determination by the EPA Administrator and the Governor of the appropriate State that no suitable land-based alternative is available. This provision expresses a concept which we feel to be most important. It is certainly our belief that municipal waste management is not strictly a local or Federal issue or responsibility, and that State governments must become involved in solving management problems for municipal wastes both at the state and regional level. Therefore, we would support this provision in principle. However, we do have a major concern that this provision gives no information how to determine that a 'suitable' land-based alternative is, or is not, currently available. Our understanding of the intent of this provision is that the State should become involved in the development of comprehensive, regional, multi-media, municipal waste management studies to identify the preferred alternatives for the management of municipal sludges within each state and/or region. We believe that other means of achieving this end would undoubtedly be more effective and, therefore, we oppose adoption of this provision.

Permit Contents

Both S824 and HR1957 contain a listing of items that must be included in permits issued by the EPA Administrator. The existing regulations already provide the Administrator with the authority to include each of the items listed by S824 and HR1957 as permit conditions. While we believe it is unnecessary to include this listing in the statutory authority, we support this provision since it will contribute toward a better understanding between EPA, the permittee, and the public, as to those matters which should be the subject of permit requirements. Our single concern with these provisions is that any permit requirements adopted by the Administrator which require the permittee to develop,

acquire or implement alternatives for management of the material should be reasonable, and should be based upon a real expectation that the alternative being developed may prove to be preferable to ocean management through a multi-media comparative assessment.

V. SITE DESIGNATION

In the past two years, the House has considered a variety of different issues with regard to the designation of ocean sites. After considerable deliberation, the House on both occasions passed a bill containing the provisions which we now find in S824 and HR1957. These provisions, making site designation mandatory and describing how the Administrator of EPA should monitor and manage designated sites, are reasonable and appropriate provisions which we do not oppose. However, we do have one major concern with regard to the criteria which must be considered by the Administrator when designating or reviewing the designation of sites. A provision adopted in the original formulation of the Marine Protection Research and Sanctuaries Act, drafted in 1972, requires that the Administrator consider designating sites beyond the edge of the continental shelf wherever feasible. We are concerned about this provision, because the ocean science community has, in the past several years, opened a very significant question with regard to the appropriateness of deep ocean sites compared to sites that are located closer to land. Simply stated, the scientific community has obtained evidence that suggests that deep ocean biota, whose natural habitat is much less variable than biota found on the continental shelf, may be more susceptible to certain disturbances in their environment, including contaminants. While there is no consensus in the scientific community as to whether this hypothesis is correct, and while it appears that it may be several years if not decades before this question can be totally and completely answered, CCA believes that this question is an important one. Therefore, we believe the decision made in good faith in 1972 that deep ocean dump sites would necessarily be better than sites on the continental shelf is no longer supportable, and we believe this absolute preference should be reexamined. We believe that, if in a given area two sites may be feasible and it is demonstrated that the site on the continental shelf poses less risk to the environment without imposing greater risk to human health, this shallower site should be used in preference to the less environmentally desirable site off the edge of the continental shelf. We would also note that despite the existing statutory provision, virtually none of the many dredged material disposal sites around the United States are located beyond the edge of the continental shelf.

CCA believes that the existing criteria, which the Administrator must consider when designating ocean sites, will ensure that no site, whether it be on or beyond the continental shelf, will be designated if the use of that site would result in serious unacceptable damage to the marine environment. We do not propose this change simply because continental shelf sites may be, in some instances, easier to use than sites beyond the edge of the continental shelf. We propose it because the biota of the deep ocean are poorly known, making it difficult to predict what the impacts of any material in the deep ocean will be. We make this recommendation also because, if we are to pursue beneficial

uses of materials such as municipal sludges, we believe it is most likely that ocean application which is designed to enhance the productivity of the ocean would be most effectively performed at appropriate locations on the continental shelf.

VI. THE MULTI-MEDIA MANAGEMENT APPROACH

CCA supports the need to perform comprehensive assessment of management options for municipal sludge, not only from the New York/New Jersey area but also from other areas of the United States, and our members are prepared to work very closely with the Congress and the Federal agencies to ensure that this end is achieved within the shortest possible time.

The several proposed amendments to the Act which this Committee will be asked to consider represent widely different approaches to the management of wastes and, in particular, the role of the ocean in such a management process. The fundamental choice before the Committee appears to be a choice between, first, medium-by-medium regulation, such that the weight of political interest in protecting a given medium or location is the determining factor as to whether an option is eliminated, and, second, a multi-media approach where a specific waste management option is adopted if it is shown to be preferable to all others with regard to risk to human health and the environment, while taking into account economic effects and public perception of each alternative. We recognize that this second option is more difficult to pursue, since it requires that both legislators and regulators maintain a strict neutrality such that no medium is either over-protected or under-protected compared to another.

We have often heard that the oceans should be afforded special consideration when choices of waste management media are made. There are two possible alternative interpretations of what special consideration might mean. First, 'special consideration' could mean that the standards applied to management of wastes in the ocean are much stricter than the standards applied to management of the same waste in other media, with the implication that this imbalance will undoubtedly result in some waste management decisions posing greater risks to human health and/or more serious environmental impacts than would be the case if the oceans were not so specially protected. In addition, adoption of such a policy raises the specter of similar policies being adopted for other media whose political constituency might be stronger than that of the ocean. The second interpretation of 'special consideration' is one that CCA feels is more reasonable. On many occasions before this Committee we have heard expressed that the oceans, as a commonly held resource, are not afforded the same protection that is afforded to resources, such as land, that are not commonly held. With this in mind, special consideration given to the ocean could well be interpreted as a commitment to prevent lesser protection of the oceans compared to other media. Certainly, there is a reasonable basis for fears that political pressures might be stronger in favor of protecting other media. CCA strongly supports special consideration for the oceans if this phrase is interpreted only as a commitment to ensure equal protection for all media.

The New York Bight Apex Restoration Plan proposed by S824 and HR1957 is an important provision of this bill. CCA supports the necessity for developing such a plan, not only for the New York Bight apex but also for other coastal areas.

VIII. SUMMARY

Our testimony has been rather long. However this Committee is faced with fundamentally different approaches to the role of the ocean as an option for management of municipal sludges. We believe that the decisions this Committee makes during the coming weeks will determine not only the future of waste management in the ocean, but also the future of the concept of multi-media management of wastes. We urge you to consider these matters very carefully since the members of this Committee, while having special responsibility for protecting and managing the oceans, also have a larger responsibility to ensure that the global environment, including the ocean, is managed and protected as effectively as our knowledge permits.

We believe that the on-going regulatory activities within EPA will lead to technically justifiable and correct management decisions with regard to ocean management of municipal wastes. We believe that the Marine Protection, Research and Sanctuaries Act, in its present form, is a carefully conceived and forward-looking piece of legislation which can ensure that these ends will be achieved. It is on this basis that we have stated that we do not believe that the statute requires, or can benefit from, major changes at this time. Among those amendments being considered by this Committee, there are many which we would support, as we have indicated in our testimony. Indeed, we have already made available to the Committee several suggested approaches to studying and implementing beneficial uses of municipal sludges in the ocean, improving monitoring of ocean disposal sites, and establishing the plans necessary to restore those areas of the coastal ocean which are currently degraded due to multiple pollutant sources. However, it has taken us over a decade under the existing formulation of the MPRSA to come to the position where careful, informed decisions can be made that ensure not only protection of the ocean but of the environment as a whole. It would indeed be unfortunate if major changes adopted by this Committee were to jeopardize that progress. We urge you to be certain that any actions that may be taken are thoroughly justified by the facts.

STATEMENT
OF
THE AMERICAN ASSOCIATION OF PORT AUTHORITIES

SUBMITTED
TO

THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION OF THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
THE HONORABLE JOHN H. CHAFEE
CHAIRMAN

REGARDING

THE REAUTHORIZATION OF TITLE I OF
THE MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT
OF 1972

JULY 30, 1985

Statement of
The American Association of Port Authorities

The American Association of Port Authorities (AAPA), founded in 1912, represents virtually all public port authorities in the United States. AAPA appreciates the opportunity to comment on S. 824, the "Ocean Revitalization Act of 1985", a bill to amend Title I of the Marine Protection, Research and Sanctuaries Act of 1972.

Our statement was prepared under the general policy guidelines of AAPA's U.S. Legislative Policy Council by the AAPA Committee on Harbors and Navigation. The committee chairman is Col. Charles A. Roberts (USA Ret.), chief engineer at the Port of Oakland. The committee is served by Attorney Joseph LeBlanc of New Orleans, who is widely known for his expertise in environmental affairs and particularly in matters regarding laws and international agreements governing and regulating open water and ocean disposal operations.

AAPA, through its Harbors and Navigations Committee, has been actively involved in the London Dumping Convention (LDC) proceedings of recent years, including debates on the treaty itself and in major research programs relating to LDC considerations. In addition to Mr. LeBlanc, who has served as our expert counsel in these matters, we have employed Dr. Willis E. Pequegnant of College Station, Texas, an oceanographer known and respected throughout the international scientific community. AAPA has an ongoing working relationship with the International Association of Ports and Harbors both in its research on ocean dumping issues and in developing positions that reflect the common interests of the world's deepwater ports in the disposal of dredged spoils in open waters and in the ocean.

AAPA has taken an active interest over the past several years in the reauthorization of the Marine Protection Research and Sanctuaries Act of 1972. Our interest in S.824 relates to the ocean disposal of dredged material and its implications for U.S. ports. Most ports must be maintenance dredged regularly to be able to continue to serve our nation's oceanborne trade. Some ports have been periodically deepened to keep pace with worldwide technological change in marine transportation. Moreover, the nine-year hiatus in water resources development legislation seems at last to be close to conclusion, especially with the successful passage on July 18 of omnibus legislation (S.1567) by the Committee on Environmental and Public Works. If, in fact, channel development projects are authorized and funded then the pressures on ports to locate and use proper dredge spoil disposal sites would likely be substantially increased.

As this committee is well aware, environmentally attractive options for disposing of dredged material are often difficult to develop. As a result, more and more attention is being given to techniques for dumping such material safely in open waters. Many of our coastal ports presently rely to some extent on open water or ocean disposal of dredged material. For some, disposal in the ocean is critical to supporting essential port development and maintenance requirements. For many valid reasons, not the least of which are environmental concerns, AAPA strongly believes that ocean dumping should be given consideration equal to other alternatives for disposal of uncontaminated dredged material.

Systems and procedures by which ocean dumping permits are regulated and administered are incorporated in S.824. It is for this reason that the port industry, represented by AAPA, has a strong

interest in S. 824 and wishes to present the following views, concerns and proposed changes.

AAPA supports the concept of selective monitoring where justified of disposal sites continued in S.824 as a useful means for tracking the impact of the dredged material deposited. However, there is a distinct difference between overall site monitoring, and monitoring individual deposits of dredged material. We believe that the value of monitoring lies in continuous and systematic site monitoring, which can be best accomplished by a single agency. Monitoring each disposal of dredged material by both EPA and the Corps, or worse, the permittee, would likely result in chaotic, unproductive and inefficient practices. The single monitoring agency should either be the EPA or the Corps of Engineers. Thus, the phrase "or cause to be monitored", to the extent it could be interpreted to require site monitoring for each separate disposal by each disposer, would best be omitted from lines 20-21 of page 3 of section 2(a)(2) of the bill; or in the alternative, clarified.

Lines 22-23 and 26 on page 5 under Section 3(1) provide for the possible inclusion as special permit provisions of a requirement that the permittee "plan, develop, acquire or implement, as appropriate - (A) alternatives for the disposal of dredged material"....and "(C) processes for recycling the material". This requirement seems to be redundant and misplaced in the permit process, since both conditions are essentially alternatives to ocean disposal and constitute an already required pre-permit step under Section 102(a)(G) of the 1972 Act. One of the reasons for issuance of an ocean disposal permit is the established absence of alternatives. Thus, making such unavailable

alternatives a permit condition creates a requirement for which compliance has already been deemed as being impossible.

Finally, we recommend inclusion under Section 3 of the 1972 Act of a definition of "municipal sludge" in Section 5 of the bill. We would also like to see included a definition of "dredged material", since the two are frequently confused and misunderstood by the general public and others.

Our aforementioned comments regarding S.824 are obviously minor and aimed at making the bill more precise, rather than recommending substantive modifications. We believe that most ports involved in ocean disposal in the United States have learned to function within the requirements of the 1972 Act. We do sense, however, that much has been learned about the ocean disposal of dredged material since the original enactment of the Ocean Dumping Act 13 years ago. We are concerned that some of the Act's underlying premises may not have kept up with the current understanding of the impact of dredged material on the ocean environment. Some more important conclusions or observations from AAPA's perspective regarding the impact of ocean disposal of dredged material based on AAPA - sponsored or other research include the following:

No one disposal medium is "worst" or "best" per se. Rather, all disposal alternatives should be evaluated for suitability on an initially equal and case-by-case basis, including use of the ocean.

Ninety to ninety-five percent of all dredged material is uncontaminated. The percentage that is contaminated does not release harmful contaminants, or when released, they are not necessarily available to, or retained within, the tissue of marine life.

When disposed of in ocean waters, dredged material descends rapidly to the bottom in a mass, causing minor, short-term and localized surface turbidity. Dredged material creates a bottom deposit normally subject to little or no dispersion.

Special care measures, especially the capping of deposits of dredged material with clean material, have proven effective in insulating the contact of deposited material from water and marine life.

In contrast to other substances disposed of in the ocean, the disposal of dredged material does not introduce a new substance not already present in tidal waters, but merely transfers it from inshore to offshore. Moreover, Corps' studies show that near shore dredge spoil disposal can be more environmentally compatible than far shore disposal.

Administrative efficiency and simplicity could probably be enhanced with no loss of environmental safeguards if one rather than two laws regulated the disposal of dredged material on both territorial and ocean waters.

The reason that most ports use the ocean for the disposal of dredged material is capacity and availability. Upland disposal is usually cited by opponents of ocean disposal as a viable and preferred alternative. However, densely populated port cities usually have little upland acreage available, and there are often local or state ordinances restricting or prohibiting dredge material disposal at those sites. Upland disposal of contaminated material also poses environmental concerns that may, in fact, exceed the effect of ocean disposal. Other possible alternatives include wetland creation, development of containment islands, sanitary landfill cover, filling subaqueous pits or abandoned quarries, or use as agricultural topsoil. Each use has its own proponents and opponents. Consensus seems virtually impossible. But the necessity of dredge spoil disposal is a real fact of life to our ports.

The ocean serves multiple uses, including meeting the needs of transportation, waste disposal, recreation, fisheries and ecological values. AAPA believes that this mixture of essential uses deserves careful management, in which environmental protection and restoration is one (albeit a critical) component of such a program. AAPA is encouraged by recent, if gradual, progress toward this concept. Moreover, we believe it should be kept in mind that dredged material is not, itself a contaminant, but a natural resource that may be exposed to and made a carrier of contamination. If the sources of contamination are curbed, then contamination caused by the ocean disposal of dredged material should be decreased. Perhaps that is the ultimate hope for the future.

Thank you for your interest in our views.

**BERGEN COUNTY UTILITIES AUTHORITY**Box 122, Foot of Mehrhof Road, Little Ferry, New Jersey 07643

TESTIMONY OF JOHN G. COSTELLO, EXECUTIVE DIRECTOR OF THE BERGEN COUNTY UTILITIES AUTHORITY, LITTLE FERRY, NEW JERSEY, BEFORE THE U.S. SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE PUBLIC HEARING ON JULY 29, 1985, IN OPPOSITION TO ANY LEGISLATION THAT WOULD UPSET THE TIMETABLE CAREFULLY WORKED OUT WITH THE EPA TO END THE DISPOSAL OF SLUDGE AT THE 12-MILE SITE

Mr. Chairman, Distinguished members of the Senate Environment and Public Works Committee, and staff members.

I would request that my inability to be present personally to offer this testimony not be considered a sign of disinterest in what you have gathered together today to deliberate. Quite the contrary. The action you will be considering has widespread economic and environmental ramifications for my agency, the other five New Jersey agencies for whom I act as spokesman, and for the over 2 million New Jersey residents who rely on us to protect their health through proper wastewater treatment services.

My name is John G. Costello. I am Executive Director of the Bergen County Utilities Authority, a position I have held for over 21 years and an agency which offers wastewater treatment services to 43 municipalities in Bergen County, New Jersey, and over 500,000 residents.

While my statements represent the convictions of my own agency, I also want you to know that they also represent the views of sister agencies in New Jersey, namely the Joint Meeting of Essex and Union Counties, Linden/Roselle Sewerage Authority, Rahwah Valley Sewerage Authority, Middlesex County Utilities Authority and the Passaic Valley Sewerage Commission.

By way of background and experience, you should know that I am now President of the Association of Metropolitan Sewerage Agencies, a nationwide organization that has been at the forefront of clean water programs since its inception almost 15 years ago and has worked closely with the Environmental Protection Agency in increasing the standards of water quality in our nation's rivers, streams and lakes.

When the Clean Water Act of 1972 became the law of the land, no individuals or groups could outshine the Association of Metropolitan Sewerage Agencies in taking credit for the passage of this legislation. Our input, our experience led to the high water quality standards that continue to open up our nation's water resources for swimming and fishing.

I mention this so that you have a clear understanding of our support for standards that recognized improvements were needed if the people of our nation were to reclaim the most prized possession they have, our water resources. You will not find in any testimony and documentation opposition from agencies which have lived from day to day with the objective of constantly improving on its treatment of wastewater so that the goals of everyone interested in clean water would, and could, be a matter of fact.

Early this month, our agencies, in conjunction with the EPA, reached a landmark agreement that has been 10 years or more in the making. By the end of 1987, sludge disposal will end at the 12-mile site off Sandy Hook. That has been the goal of our distinguished Senators from New Jersey - Senator Frank Lautenberg and Senator William Bradley. That has been our goal as well in spite of the mixed signals we had been getting in the past which indicated that no one was quite sure of the best way to handle the sludge disposal problem. Let me brief you on what transpired.

In the mid-1970's the EPA set its "swimmable and fishable" goals for the nation's waterways and at the same time mandated that sewerage agencies develop land-based alternatives to the ocean disposal of sludge. On the surface, this goal seemed admirable and attainable...until you tried to achieve this goal.

My agency, the Bergen County Utilities Authority, spent thousands of dollars for engineering studies and public hearings in an effort to site a dewatering and composting facility. The State of New Jersey spent thousands of dollars commissioning a study to determine what markets existed for the composted sludge and came up with a number of "useful" opportunities to sell a product they called "Gardenite."

"Gardenite" was to be the cureall for sludge disposal. It would provide inexpensive soil cover for parks and playgrounds. It would, we were told, be quickly gobbled up by farmers looking for acceptable materials that would offset fertilizer costs.

But there was a hitch to this that was not revealed at the time. Warnings eventually came out that composted sludge should not be used in the food chain. It contained heavy metals and carcinogens that would generate more health problems to the community than would be solved.

And there was more. On a visit to the U.S. Department of Agriculture in 1978 to inspect a composting operation in Beltsville, Maryland, my agency was told to beware of air spores emanating from the composting operation. We were told by Agriculture Department officials that a composting operation should not be located within two miles of any hospitals or senior citizen housing. If it was, the health of people in these facilities could be jeopardized.

Further, the State Department of Environmental Protection issued a regulation that prevented the use of composted sludge as a soil cover at our landfills.

Obviously, no one was sure of which way to go with a land-based alternative to ocean disposal. Yet, my agency and the others conscientiously pursued the course of action that was imposed on us by the so-called experts. For instance, one of our agencies took the initiative to meet the 1981 deadline and spent over \$25 million on a dewatering facility, which is not now being used.

It was then that the New Jersey sewerage agencies took a different tack...we felt that the sludge that was being produced was not deleterious to the ocean environment, and we attempted to prove our case.

All of the New Jersey sewerage agencies provided secondary treatment. The byproduct of these operations was as dissimilar to what the New York operations produced as day and night. Our sludge was stabilized, and, in our opinion as well as those of our consultants, was safe for disposal in the ocean.

Another treatment advance came into being a year ago. All of the New Jersey sewerage agencies adopted industrial pretreatment regulations which prohibit the discharge of contaminants in the municipal sewer systems if they would impede the treatment process. The industrial users of our treatment facilities are paying for this service out of their own pockets. While the program is still in its formative stages, cooperation from industry is outstanding.

I point this out because we, the agencies who are under the gun to implement whatever legislation you enact or whatever regulations the EPA develops, deserve clear-cut, cost-effective and technologically sound directions if we are to achieve our mutual objectives. We do not have the resources, not even on a combined basis, to develop the insights that will offer solutions to the inherent problems of sludge disposal. That is why we support Senator Lautenberg's initiative of legislating a study to develop an alternative to ocean disposal of sludge. We need this help. We implore you to give it to us.

Early this month the EPA announced a landmark agreement that will put an end to disposal of sludge at the 12-mile site in favor of the 106-mile site. This agreement recognized the needs of our sewerage agencies in preparing for this transition. I would like to point out to you just what these considerations were, and I believe that you will see that they are reasonable by any standards.

1. We are dependent on haulers to barge our sludge to the ocean disposal sites. The haulers have told us that they do not have the vessels necessary to transport the sludge to the 106-mile site on a schedule that will alleviate our storage problems.
2. We do not have the storage or warehousing capacity to store the material. To build the necessary storage capacity takes time. It is safe to say that we will be at the 106-mile site before any additional storage capacity could be built.
3. We are concerned about the impact of disposal at the 106-mile site on our budgets. Barging to the 106-mile site will be expensive. The New Jersey sewerage agencies want price stability. The only way this can happen is if we join together and form a common pool that will protect our interests as well as those of the taxpayers. At present, state law does not permit us to form a "joint venture" to contract with one hauler to barge the sludge. We expect legislation will be enacted when the State Legislature re-convenes in September 1985.

As you are undoubtedly aware, our agencies will cut back sludge disposal at the 12-mile site by 25 percent by May 1986 and phase out the use of this site completely by the end of 1987. Any legislation that would speed up this timetable would seriously jeopardize the fair and reasonable transition we are moving ahead on.

It is in the best interests of all concerned to stay with the agreed-upon timetable. You can be sure that we will adhere to this schedule.

John G. Costello
Executive Director
Bergen County Utilities Authority

PROPOSED AMENDMENTS TO TITLE I OF THE
MARINE PROTECTION RESEARCH AND SANCTUARIES ACT

Supported by the Conference of Coastal Agencies

The Conference of Coastal Agencies has developed draft amendments to Title I of the Marine Protection Research and Sanctuaries Act which would improve the Act's effectiveness in ensuring protection of human health and the marine environment. Most of the provisions in this draft amendment are identical to those provisions agreed upon by the Merchant Marine and Fisheries Committee, Public Works Committee, and Full House during the last Congress. New provisions have been added which would improve monitoring of disposal sites and would enable study and development of the beneficial ocean application of municipal sludges analogous to their beneficial use as fertilizers on land.

The principal provisions of the draft bill are described below. Those provisions which differ from those approved by the House in the last Congress are specifically identified.

1. The EPA Administrator is required to designate all ocean disposal sites ~~only after a~~ detailed environmental assessment. Factors that must be considered in determining the suitability of a site for designation are established.

2. EPA is required to periodically monitor ocean disposal sites, review the designation decision every five years on the basis of this monitoring information, and terminate designation or limit use of the site if the site is found to be no longer suitable on the basis of the designation criteria.

3. The provision requiring site monitoring contains a new CCA-drafted section which provides guidance to the EPA Administrator concerning the purposes of the site monitoring program. This provision will enhance the effectiveness of site monitoring programs by ensuring that such programs are properly designed to address those potential effects of the disposal which, if found, may be likely to justify changes in the permitted use of the site.

4. Those items, including waste quantity and quality, site location, and period of validity, are established which must be specified in each ocean disposal permit. In addition, it is provided

that the EPA Administrator, if necessary, may establish permit requirements which mandate the development of alternatives to the permitted disposal. This provision has been amended by CCA to clarify that the alternatives which the Administrator can require be developed include other ocean disposal sites or practices and beneficial ocean application.

5. The Administrator is required to prescribe and collect an application fee which will recover the administrative cost of processing the permit application.

6. The Administrator of EPA is required to establish and maintain a quality assurance program for all data utilized in administering the Act.

7. Penalties are established for any person who falsifies information required to administer the Act.

8. The Administrator is required to establish a schedule for completing designation of all ocean disposal sites. All currently undesignated sites are dredged material sites.

9. The Administrator is required to develop a Restoration Plan for the New York Bight apex which addresses all sources of contaminants and establishes the most cost-effective approach to restoration of the marine ecosystem by reducing or eliminating effects on the marine resources of the apex.

10. A new provision is added by CCA to the section on Restoration Plans which requires the EPA Administrator to prepare a report which identifies those other areas of the coastal and estuarine ocean of the United States where marine resources are adversely affected by multiple sources of contamination and which need restoration plans similar to that plan to be prepared for the New York Bight apex.

11. A new section is proposed by CCA which would require the EPA Administrator to prepare a report addressing the feasibility of beneficial ocean application of municipal sludge and wastewater. The report would identify research and regulatory activities needed to allow the development and use of beneficial ocean application management practices.

12. The existing requirement of the Act that "whenever feasible" ocean disposal sites be designated beyond the continental shelf has been

deleted by CCA. This change is necessary to allow selection of the most environmentally appropriate sites according to the site-designation criteria established by this bill. If sites beyond the edge of the shelf are environmentally preferable, they will still be selected through application of the criteria. This amendment is also needed to facilitate beneficial uses of municipal sludge in the ocean, since such uses will probably be most effective on the continental shelf.

13. Several other minor amendments are included relating to prohibitions on permit issuances for certain radioactive materials and warfare agents, the incorporation of wetlands in those areas protected by the Act, and adjustments to EPA's annual reporting requirements to the Congress.

It should be noted that a provision included in the House bill from the last Congress which required all permittees to be in compliance with pretreatment regulations by a certain date is not included in this CCA draft. Although CCA supports the concept of this provision, the mechanism of an absolute deadline is inappropriate. CCA would support a provision requiring compliance with pretreatment regulations if an appropriate formulation not containing a deadline can be achieved. Nonetheless, at present, all CCA members and all other municipalities holding ocean disposal permits for their sludges are in compliance with all current pretreatment regulatory requirements.

We strongly urge your support of this bill as the most appropriate means of amending the Marine Protection Research and Sanctuaries Act to ensure the continued effectiveness of the Act in meeting its goals.

A BILL

To amend title I of the Marine Protection, Research, and Sanctuaries Act of 1972.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

That this Act may be cited as the "Ocean Management Amendments Act of 1985".

SEC. 2. PERMIT PROGRAM

(a) Section 102 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1412) is amended as follows:

(1) Subsection (a) is amended -

(A) by inserting "(1)" after "(a)";

(B) by striking out ", and in relation to radiological, chemical, and biological warfare agents and high-level radioactive waste, for which no permit may be issued," and inserting ", and except as provided in paragraphs (2) and (3),";

(C) by amending paragraph (C) by striking out "and beaches." and inserting in lieu thereof ", beaches, and wetlands.";

(D) by deleting paragraph (I); and

(E) by adding at the end thereof the following new paragraphs:

"(2) No permit may be issued under this title in relation to the following:

"(A) Radiological, chemical, and biological warfare agents.

"(B) High-level radioactive waste.

(2) Subsection (c) is amended to read as follows:

"(c)(1) The Administrator shall designate sites at which materials may be disposed pursuant to this section

and, after consultation with the Secretary, at which materials may be disposed pursuant to section 103; except that no site may be designated by the Administrator under this subsection until the Administrator undertakes and completes an analysis of the characteristics of the site and its suitability for disposal and of the environmental effects which will likely result from disposal. In undertaking such an analysis of each site, the Administrator shall take into consideration the criteria established pursuant to subsection (a) and shall specifically take into account the following factors:

"(A) The types and quantities of wastes and pollutants projected to be deposited in, and adjacent to, the site from disposal and other sources.

"(B) The ability of the waters at the site to disperse, detoxify, or neutralize the materials.

"(C) The importance of the site to the surrounding biological community, including the presence of breeding, spawning, nursery or foraging areas, migratory pathways, or areas necessary for other functions or critical stages in the life cycle of marine organisms.

"(D) The immediate and cumulative effects on human health and on the ecosystem adjacent to the site and the persistent effects on the ecosystem within the site.

"(E) The effect on human health, welfare, or amenities, or the marine or terrestrial environment, ecological systems, or economic potentialities of using alternative sites or land-based disposal alternatives.

Nothing contained in this paragraph shall be construed to limit the authority of the Secretary under section 103.

"(2) The Administrator shall -

"(A) periodically monitor, or cause to be monitored, the effects of the disposal of materials at or adjacent to each site for which the Administrator

determines, on the basis of the characteristics of the site and the materials to be disposed, that such monitoring is necessary to accomplish the purposes of this title. Monitoring shall be designed to demonstrate that biological changes or chemical or physical changes in the water column, sediments, or biota caused by the disposal do not exceed those levels or degrees of change which are determined to:

- (i) be capable of measurement in a practicable program considering the natural variability of the measured parameter and the variability inherent in measurement of the parameter,

- (ii) have a reasonable probability of occurrence, and

- (iii) be significant to human health, welfare, or amenities, or potentially damaging to the marine environment or ecological systems.

Information available from site designation studies, permit applications, and historical studies of the disposal site and other sites or discharges shall be used together with the results of monitoring in making such determinations. Based on new information from these and other appropriate sources, the monitoring program shall be modified periodically to address new or modified hypotheses of effects; or to reflect a finding that, at an acceptable level of certainty, one or more hypothesized effect does not and will not exceed the level specified under paragraph (iii) of this subsection; and

- “(B) at the close of the fifth year after the site designation and at every five year interval thereafter until such time as the designation is terminated, estimate the extent of the disposal and other waste inputs that will occur in and adjacent to each site during the next five-year period.

"(3) If at any time the Administrator, on the basis of the criteria established pursuant to subsection (a), determines that the site is no longer suitable for such disposal, the Administrator shall -

"(A) limit disposal at the site to certain materials or at certain times or both; or

"(B) suspend or terminate the designation of the site under paragraph (1).

In making a determination under the preceding sentence that a site is no longer suitable for disposal pursuant to section 103, the Administrator shall consult with the Secretary."

(b) Section 103(b) of the Marine Protection Research and Sanctuaries Act of 1972 (33 U.S.C.1413(b)) is amended by striking out "recommended" in the last sentence.

SEC. 3. PERMIT CONDITIONS

Section 104 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1414) is amended as follows:

(1) Subsection (a) is amended as follows:

"(a) Permits issued under this title shall designate and include -

"(1) the type of material authorized to be transported for disposal or to be disposed;

"(2) the amount of material authorized to be transported for disposal or to be disposed;

"(3) the location where such transport for disposal will be terminated or where such disposal will occur;

"(4) the length of time for which the permits are valid and their expiration date;

"(5) any special provisions deemed necessary by the Administrator or the Secretary, as the case may be, to minimize the harm or maximize the benefits from disposal, which may include measures that the permittee

must take to plan, develop, acquire, or implement, as appropriate -

"(A) alternatives for the disposal of the material, including land-based alternatives and alternative ocean sites or means of ocean application,

"(B) processes for reducing or eliminating any contaminants in the material, or

"(C) processes for beneficial use of the material either on land or in the ocean.

"(6) after consultation with the Secretary of the Department in which the Coast Guard is operating, any special provisions deemed necessary by the Administrator or the Secretary, as the case may be, for the monitoring and surveillance of the transportation or disposal; and

"(7) such other matters as the Administrator or the Secretary, as the case may be, deems appropriate.".

(2) Subsection (b) is amended to read as follows:

"(b)(1) The Administrator or the Secretary, as the case may be, shall prescribe and collect from the applicant, unless the applicant is a Federal agency, an application fee in an amount commensurate with the reasonable administrative costs incurred or expected to be incurred by the Administrator or Secretary in processing the permit. The application fee shall be deposited to the principal appropriation account or accounts used to carry out the processing of permits under this title.

(3) Subsection (e) is redesignated as subsection (e)(1) and after it the following new subsection is inserted:

"(2) The Administrator and the Secretary shall establish and maintain quality assurance programs to ensure the validity, accuracy, and sufficiency of information submitted to or used by the Administrator or the Secretary in connection with applications for permits or other

activities undertaken pursuant to this title. Such quality assurance programs shall encompass, but not be limited to, the design, implementation, and analysis of sampling, testing, and monitoring procedures and results. The Administrator and the Secretary shall each individually report annually, in conjunction with the report required under section 112 of this title, on the status of implementation of this subsection: Provided, however, That the first such quality assurance report shall be submitted to the Congress no later than two hundred and seventy days after the effective date of this subsection."

(4) The following new subsection is added at the end thereof:

"(j) The Administrator or Secretary, as the case may be, may prescribe such reporting requirements as he or she deems appropriate with regard to actions taken by permittees pursuant to permits issued under this title."

SEC. 4. TRANSITIONAL PROVISIONS

Until completion of the site designation or denial of site designation by the Administrator of the Environmental Protection Agency with respect to any areas of ocean waters approved for disposal on an interim basis before July 1, 1982, and any areas of ocean waters used for disposal pursuant to a court order, the amendments made by this Act to the Marine Protection, Research, and Sanctuaries Act of 1972 (other than section 102(a) as amended by section (2)(a)(1), other than subsection (c)(2) and (3) of section 102 as amended by section (2)(a)(2), and other than those made by sections 2(b), 3, 6, 7, 8, 10, 11, and 13 of this Act) shall not be applicable to those areas of ocean water.

SEC. 5. DEFINITIONS

Section 3 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1402) is amended -

(1) by inserting ", and the subjacent areas,"

immediately after "those waters" in subsection (b);

(2) by striking out "sewage sludge," in subsection (c) and inserting in lieu thereof "municipal sludge,"; and

(3) by adding at the end thereof the following new subsections:

SEC. 6. PENALTIES

Subsection 105(b) of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1415) is redesignated as section 105(b)(1), and the following new paragraph is inserted thereafter:

"(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under this title or who falsifies, tampers with, or knowingly renders inaccurate any monitoring, sampling, or testing device or method required to be maintained or implemented under this title, shall upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six months, or by both. For purposes of this section, the term 'person' shall mean, in addition to the definition contained in section 3(e) of this title, any responsible corporate officer."

SEC. 7. SCHEDULE FOR COMPLETION.

The Administrator of the Environmental Protection Agency shall establish a schedule for expeditiously completing the study and designation or denial of designation of all areas of ocean waters approved before July 1, 1982, for disposal on an interim basis and areas of ocean waters used for disposal pursuant to a court order. The Administrator shall submit this schedule to Congress not later than the one hundred and eightieth day after the date of enactment of this Act.

SEC. 8. ANNUAL REPORTS.

Section 112 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1421) is amended to read as follows:

"SEC. 112. In March of each year, the Administrator and the Secretary shall each individually report to the Congress on the administration of this title during the previous calendar year."

SEC. 9. RESTORATION PLANS.

(a) Title I of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.) is further amended by inserting after section 104 the following new section:

"SEC. 104A. (a) For the purposes of this section the term 'Apex' means the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and northward of 40 degrees 10 minutes north latitude.

"(b)(1) Within three years after the date of the enactment of this section, the Administrator shall prepare, and submit to the Congress a New York Bight Apex Restoration Plan. In preparing the plan, the Administrator shall hold public hearings in order to obtain the views and comments of interested persons.

"(2) The New York Bight Apex Restoration Plan required to be prepared under paragraph (1) shall -

"(A) identify and assess the impact of pollutant inputs, such as treated and untreated sewage discharge, industrial outfall, agricultural and urban runoff, storm sewer overflow, upstream contaminant sources, atmospheric fallout, and disposal, that are affecting or potentially affecting the water quality and marine resources of the Apex;

"(B) identify those uses in the Apex that are

being inhibited because of those inputs;

"(C) identify, if known, the fate of the contaminants from those inputs and their effects on the marine environment;

"(D) identify technologies and management practices, and determine the costs necessary to control those inputs;

"(E) identify impediments to the cleanup of those inputs;

"(F) evaluate the environmental improvement in the Apex expected to be achieved by each technology or management practice identified under subparagraph (D) and determine the relative cost-effectiveness of each such technology or management practice in achieving such environmental improvements;

"(G) taking into account the findings of subparagraphs (A) through (F), establish priorities and devise a schedule of economically feasible projects to implement the controls identified under subparagraph (D) and to remove the impediments identified under subparagraph (E) in order to ensure the most cost-effective and expeditious restoration of those uses of the Apex which are found to be most affected under subparagraph (B);

"(H) develop recommendations for funding and coordinating the various Federal, State, and local government programs necessary to implement the projects devised under subparagraph (G).

Within six months after the date of the enactment of this section, the Administrator shall submit to the Congress a detailed schedule (and the associated funding requirements) for completing the restoration plan required by this subsection.

"(c)(1) Within one year after the date of enactment of this section, the Administrator shall prepare and submit to Congress a report which identifies those areas of coastal

ocean of the United States other than the Apex within which ocean uses are significantly adversely affected by pollutant inputs including those inputs identified in subparagraph (b)(2)(A) of this section. In identifying such areas, the Administrator shall obtain the views and comments of the Governors of the States affected, potentially affected ocean users, and the public.

"(2) The report required to be prepared under paragraph (1) shall -

(A) identify those areas of the coastal ocean of the United States, including adjacent estuaries where appropriate, which are significantly adversely affected by pollutants.

(B) identify for each of these areas those uses which are adversely affected and the degree of impact.

(C) identify for each of these areas the significant sources of pollutants contributing to the effects.

(D) assess the degree to which ocean uses are adversely affected in each area and compare the degree of adverse effects among identified areas and when compared to the Apex.

(E) identify those areas for which a restoration plan such as the plan to be prepared for the Apex under subsection (b) of this section would be appropriate taking into account the severity of adverse effects on ocean uses and the complexity of restoration efforts due to the existence of multiple pollutant sources."

"(d) There are authorized to be appropriated to the Environmental Protection Agency, for purposes of preparing the plans required under subsections (b) and (c), the following amounts:

"(1) \$2,000,000 for fiscal year 1986.

"(2) \$2,000,000 for fiscal year 1987.

"(3) \$1,000,000 for fiscal year 1988.

"(e) There is authorized to be appropriated to the

Environmental Protection Agency \$40,000,000 in each fiscal year beginning in fiscal year 1986 for projects to improve the water quality of the Hudson-Raritan Estuary and the New York Bight consistent with the plan under subsection (b) of this section. These funds may be transferred to other Federal, State, and local agencies to fund projects within the Administrator's discretion."

SEC. 10. MUNICIPAL SLUDGE OCEAN APPLICATION PLAN.

(a) Title I of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1401 et seq.) is further amended by inserting after section 104A the following new section:

"SEC.104B.(a) Within two years after enactment of this section, the Administrator shall prepare and submit to Congress a Municipal Sludge Ocean Application report which provides technical information needed to assess the means by which municipal sludge can be applied to the ocean as a fertilizer and organic food supplement to benefit production of aesthetically or economically valuable biomass. The Municipal Sludge Ocean Application Report required to be prepared under this section shall:

- (1) provide an assessment of the potential fertilizer and/or food supplement value of municipal sludges in the ocean environment and compare these potential benefits with the similar benefits obtained by land application of municipal sludge or composted municipal sludge;
- (2) identify the types of ocean environment that could benefit from the application of municipal sludge;
- (3) identify the technological means by which municipal sludge application to the ocean could be achieved and by which an optimum application rate can be achieved;
- (4) identify impediments to the controlled beneficial application of municipal sludge to the ocean

including impediments caused by: statutory prohibitions or other requirements, permit, site designation or other regulatory requirements; technological difficulties in applying municipal sludge to the ocean in a controlled manner; lack of scientific information needed to establish optimum application rates; and adverse effects of contaminants in municipal sludge;

(5) identify scientific studies, technologies, management procedures and alternative treatments for municipal sludge which could be applied to mitigate or remove impediments identified in subparagraph (4);

(6) identify alternative wastewater and municipal sludge treatment processes which could result in optimizing the benefits and minimizing any adverse effects of municipal sludge applied to the ocean, or in reducing the cost of treatment without any increase in potential adverse effects.".

"(b) There are authorized to be appropriated to the Environmental Protection Agency, for purposes of preparing the report required under subsection (a), the following amounts:

- (1) \$2,000,000 for fiscal year 1986.
- (2) \$1,000,000 for fiscal year 1987.

SEC. 11. AUTHORIZATION OF APPROPRIATIONS.

Section 111 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1420) is amended-

(1) by striking out "title," and inserting in lieu thereof "title (other than sections 104A and 104B)";

(2) by striking out "and" immediately following "fiscal year 1981,"; and

(3) by inserting "and not to exceed \$8,856,000 for each of fiscal years 1986, and 1987," immediately after "fiscal year 1982,".

99TH CONGRESS
1ST SESSION

S. 824

To reauthorize and amend title I of the Marine Protection, Research, and Sanctuaries Act of 1972, to ban ocean dumping at the twelve-mile site, to develop a plan for the revitalization of the New York Bight Apex and the Hudson-Raritan Estuary, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 1 (legislative day, FEBRUARY 18), 1985

Mr. LAUTENBERG (for himself and Mr. BRADLEY) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To reauthorize and amend title I of the Marine Protection, Research, and Sanctuaries Act of 1972, to ban ocean dumping at the twelve-mile site, to develop a plan for the revitalization of the New York Bight Apex and the Hudson-Raritan Estuary, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That this Act may be cited as the "Ocean Revitalization Act
4 of 1985".

1 SEC. 2. DUMPING PERMIT PROGRAM.

2 (a) Section 102 of the Marine Protection, Research, and
3 Sanctuaries Act of 1972 (33 U.S.C. 1412) is amended as
4 follows:

5 (1) Subsection (a) is amended by inserting at the
6 end thereof the following: "No permit may be issued or
7 renewed under this title that authorizes the dumping,
8 or the transportation for purposes of dumping, after
9 December 31, 1986, of municipal sludge, whether or
10 not the sludge is subject to section 104A, unless the
11 sewerage authority or other unit of State or local gov-
12 ernment operating the plant at which the municipal
13 sludge is generated is in compliance with all require-
14 ments of sections 307(b) and 402(b)(8) of the Federal
15 Water Pollution Control Act (33 U.S.C. 1317(b) and
16 1342(b)(8), relating to requirements for an effective and
17 comprehensive pretreatment program).".

18 (2) Subsection (c) is amended to read as follows:

19 "(c)(1) The Administrator shall designate sites at which
20 materials may be dumped pursuant to this section and, after
21 consultation with the Secretary, at which materials may be
22 dumped pursuant to section 103; except that no site may be
23 designated by the Administrator under this subsection until
24 the Administrator undertakes and completes an analysis of
25 the characteristics of the site and its suitability for dumping
26 and of the environmental effects which will likely result from

1 dumping. In undertaking such an analysis of each site, the
2 Administrator shall take into consideration the criteria estab-
3 lished pursuant to subsection (a) and shall specifically take
4 into account the following factors:

5 “(A) The types and quantities of wastes and pol-
6 lutants projected to be deposited in, and adjacent to,
7 the site from dumping and other sources.

8 “(B) The ability of the waters at the site to dis-
9 perse, detoxify, or neutralize the materials.

10 “(C) The importance of the site to the surround-
11 ing biological community, including the presence of
12 breeding, spawning, nursery or foraging areas, migra-
13 tory pathways, or areas necessary for other functions
14 or critical stages in the life cycle of marine organisms.

15 “(D) The immediate and cumulative effects on
16 human health and on the ecosystem adjacent to the
17 site and the persistent effects on the ecosystem within
18 the site.

19 “(2) The Administrator shall—

20 “(A) periodically monitor, or cause to be moni-
21 tored, the effects of the dumping of materials at or ad-
22 jacent to each site for which the Administrator deter-
23 mines, on the basis of the characteristics of the site
24 and the materials to be dumped, that such monitoring

1 is necessary to accomplish the purposes of this title;
2 and

3 “(B) at the close of the third year after the site
4 designation and at every three-year interval thereafter
5 until such time as the designation is terminated, esti-
6 mate the extent of the dumping and other waste inputs
7 that will occur in and adjacent to each site during the
8 next three-year period.

9 “(3) If at any time the Administrator, on the basis of the
10 factors taken into account under subparagraphs (A) through
11 (D) of paragraph (1), or on the basis of the monitoring or
12 estimates, or both, required under paragraph (2), determines
13 that the site is no longer suitable for such dumping, the Ad-
14 ministrator shall—

15 “(A) limit dumping at the site to certain materials
16 or at certain times or both; or

17 “(B) suspend or terminate the designation of the
18 site under paragraph (1).

19 In making a determination under the preceding sentence that
20 a site is no longer suitable for dumping pursuant to section
21 103, the Administrator shall consult the Secretary.”

22 (b) Section 103(b) of the Marine Protection, Research,
23 and Sanctuaries Act of 1972 (33 U.S.C. 1413(b)) is amended
24 by striking out “recommended” in the last sentence.

1 SEC. 3. PERMIT CONDITIONS.

2 Section 104 of the Marine Protection, Research, and
3 Sanctuaries Act of 1972 (33 U.S.C. 1414) is amended as
4 follows:

5 (1) Subsection (a) is amended to read as follows:

6 "(a) Permits issued under this title shall designate and
7 include—

8 "(1) the type of material authorized to be trans-
9 ported for dumping or to be dumped;

10 "(2) the amount of material authorized to be
11 transported for dumping or to be dumped;

12 "(3) the location where such transport for dump-
13 ing will be terminated or where such dumping will
14 occur;

15 "(4) the length of time for which the permits are
16 valid and their expiration date;

17 "(5) any special provisions deemed necessary by
18 the Administrator or the Secretary, as the case may
19 be, to minimize the harm from dumping, which may in-
20 clude measures that the permittee must take to plan,
21 develop, acquire, or implement, as appropriate—

22 "(A) alternatives for the disposal of the ma-
23 terial,

24 "(B) processes for reducing or eliminating
25 any contaminants in the material, or

26 "(C) processes for recycling the material;

1 “(6) after consultation with the Secretary of the
2 Department in which the Coast Guard is operating,
3 any special provisions deemed necessary by the Admin-
4 istrator or the Secretary, as the case may be, for the
5 monitoring and surveillance of the transportation or
6 dumping; and

7 “(7) such other matters as the Administrator or
8 the Secretary, as the case may be, deems appropri-
9 ate.”.

10 (2) Subsection (e) is redesignated as subsection
11 (e)(1) and after it the following new subsection is in-
12 serted:

13 “(2) The Administrator and the Secretary shall establish
14 and maintain quality assurance programs to ensure the validi-
15 ty, accuracy, and sufficiency of information submitted to or
16 used by the Administrator or the Secretary in connection
17 with applications for permits or other activities undertaken
18 pursuant to this title. Such quality assurance programs shall
19 encompass, but not be limited to, the design, implementation,
20 and analysis of sampling, testing, and monitoring procedures
21 and results.”.

22 (3) The following new subsection is added at the
23 end thereof:

24 “(j) The Administrator or Secretary, as the case may
25 be, may prescribe such reporting requirements as he or she

1 deems appropriate with regard to actions taken by permittees
2 pursuant to permits issued under this title.”.

3 **SEC. 4. TRANSITIONAL PROVISIONS.**

4 Until completion of the site designation or denial of site
5 designation by the Administrator of the Environmental Pro-
6 tection Agency with respect to any areas of ocean waters
7 approved for dumping on an interim basis before July 1,
8 1982, the amendments made by this Act to the Marine Pro-
9 tection, Research, and Sanctuaries Act of 1972 (other than
10 section 102(a) as amended by section (2)(a)(1), other than
11 subsection (c) (2) and (3) of section 102 as amended by sec-
12 tion (2)(a)(2), and other than those made by sections 2(b), 3,
13 5, 6, 8, and 9 of this Act) shall not be applicable to those
14 areas of ocean water.

15 **SEC. 5. DEFINITIONS.**

16 Section 3 of the Marine Protection, Research, and Sanc-
17 tuaries Act of 1972 (33 U.S.C. 1402) is amended—

18 (1) by striking out “sewage sludge,” in subsection
19 (c) and inserting in lieu thereof “municipal sludge,”;
20 and

21 (2) by adding at the end thereof the following new
22 subsections:

23 “(m) ‘Municipal sludge’ means solid, semisolid, or liquid
24 waste generated by a waste water treatment plant of a sew-
25 erage authority or other unit of State or local government or

1 a privately owned or operated waste water treatment plant
2 which treats predominately domestic sewage.”.

3 **SEC. 6. PENALTIES.**

4 Subsection 105(b) of the Marine Protection, Research,
5 and Sanctuaries Act of 1972 (33 U.S.C. 1415) is redesignat-
6 ed as section 105(b)(1), and the following new paragraph is
7 inserted thereafter:

8 “(2) Any person who knowingly makes any false state-
9 ment, representation, or certification in any application,
10 record, report, plan, or other document filed or required to be
11 maintained under this title or who falsifies, tampers with, or
12 knowingly renders inaccurate any monitoring, sampling, or
13 testing device or method required to be maintained or imple-
14 mented under this title, shall upon conviction, be punished by
15 a fine of not more than \$10,000, or by imprisonment for not
16 more than six months, or by both. For purposes of this sec-
17 tion, the term ‘person’ shall mean, in addition to the defini-
18 tion contained in section 3(e) of this title, any responsible
19 corporate officer.”.

20 **SEC. 7. SCHEDULE FOR COMPLETION.**

21 The Administrator of the Environmental Protection
22 Agency shall establish a schedule for expeditiously complet-
23 ing the study and designation or denial of designation of all
24 areas of ocean waters approved before July 1, 1982, for
25 dumping on an interim basis. The Administrator shall submit

1 this schedule to Congress not later than the one hundred and
2 eightieth day after the date of enactment of this Act.

3 **SEC. 8. NEW YORK BIGHT APEX.**

4 Title I of the Marine Protection, Research, and Sanctu-
5 aries Act is amended by adding the following new section:

6 "NEW YORK BIGHT APEX

7 "SEC. 113. (a) The Congress finds and declares that the
8 New York Bight Apex is not a suitable location for the ocean
9 dumping of municipal sludge.

10 "(b)(1) The Administrator may not issue, or renew, any
11 permit under this title that authorizes the dumping of, or the
12 transportation for purposes of dumping, municipal sludge at
13 the Apex site or anywhere within the Apex after the day
14 determined by the Administrator to be the first day on which
15 municipal sludge can reasonably be dumped at a site desig-
16 nated under section 102 other than a site within the Apex
17 but no later than eighteen months from the date of enactment
18 of the Ocean Revitalization Act.

19 "(c)(1) Not later than three years after the date of en-
20 actment of the Ocean Revitalization Act, the Administrator,
21 in consultation with Federal, State, and interstate agencies,
22 shall prepare, and submit to the Congress a New York Bight
23 Apex, Hudson-Raritan Estuary Restoration Plan. In prepar-
24 ing such plan, the Administrator shall hold public hearings in
25 the affected States to obtain the views and comments of in-
26 terested persons.

1 “(2) Such plan shall—

2 “(A) identify and assess the impact of pollutant
3 inputs, such as treated and untreated sewage dis-
4 charge, industrial outfalls, agricultural and urban
5 runoff, storm sewer overflow, upstream contaminant
6 sources, and dumping that are affecting the water qual-
7 ity and marine resources of the Apex and the Estuary;

8 “(B) identify those uses in the Apex, the Estuary
9 or on nearby shore areas that are being inhibited be-
10 cause of those inputs;

11 “(C) determine the fate of the contaminants
12 from those inputs and their effect on the marine
13 environment;

14 “(D) identify technologies and management prac-
15 tices, and determine the costs necessary to control
16 those inputs;

17 “(E) identify impediments to the use of such tech-
18 nologies and management practices and to the cleanup
19 of those inputs;

20 “(F) devise a schedule of economically feasible
21 projects to implement the controls identified under sub-
22 paragraph (D) and to remove the impediments identi-
23 fied under subparagraph (E); and

24 “(G) develop recommendations for funding and co-
25 ordinating the various Federal, State, and local gov-

1 ernment programs necessary to implement the projects
2 devised under subparagraph (F).

3 “(3) Not later than six months after the date of enact-
4 ment of the Ocean Revitalization Act, the Administrator
5 shall submit to the Congress a detailed schedule (and any
6 associated funding requirements) for completing the restora-
7 tion plan required by this subsection.

8 “(4) There are authorized to be appropriated to the Ad-
9 ministrator of the Environmental Protection Agency, for pur-
10 poses of preparing the New York Bight Apex Restoration
11 Plan required under this subsection, not to exceed
12 \$2,000,000 for fiscal year 1985, \$2,000,000 for fiscal year
13 1986, and \$1,000,000 for fiscal year 1987.

14 “(d) Within eighteen months after the date of enactment
15 of the Ocean Revitalization Act, the Administrator shall pre-
16 pare, and submit to the Congress, a comprehensive assess-
17 ment of the land-based disposal options for municipal sludge
18 generated by those dumping municipal sludge within the
19 Apex on January 1, 1985.

20 “(e) For the purposes of this section—

21 “(1) The term ‘Apex’ means the New York Bight
22 Apex consisting of the ocean waters of the Atlantic
23 Ocean westward of 73 degrees 30 minutes west longi-
24 tude and northward of 40 degrees 10 minutes north
25 latitude.

1 “(2) The term ‘Apex site’ means that site within
2 the Apex at which the dumping of municipal sludge oc-
3 curred before October 1, 1983.”.

4 SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

5 Section 111 of the Marine Protection, Research, and
6 Sanctuaries Act of 1972 (33 U.S.C. 1420) is amended—

7 (1) by striking out “title,” and inserting in lieu
8 thereof “title (other than section 104A(d)(1)),”;

9 (2) by striking out “and” immediately following
10 “fiscal year 1981,”; and

11 (3) by inserting “and not to exceed \$4,250,000
12 for each of fiscal years 1985, 1986, 1987, and 1988,”
13 immediately after “fiscal year 1982,”.

○

99TH CONGRESS
1ST SESSION

S. 1502

To amend and extend title I of the Marine Protection, Research, and Sanctuaries Act, as amended, for two years.

IN THE SENATE OF THE UNITED STATES

JULY 25 (legislative day, JULY 16), 1985

Mr. CHAFEE (by request) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend and extend title I of the Marine Protection, Research, and Sanctuaries Act, as amended, for two years.

- 1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That section 111 of the Marine Protection, Research, and
4 Sanctuaries Act, as amended (33 U.S.C. 1420), is amended
5 by striking "and" immediately following "1981," and insert-
6 ing "and not to exceed \$8,863,800 for fiscal year 1986, and
7 such sums as may be necessary for fiscal year 1987," imme-
8 diately following "1982,".

○